SONY

3-756-618-24 (1)

Trinitron® Color TV

Operating Instructions

Before operating your TV, please read this manual thoroughly and retain it for future reference.

KV-27TS29
KV-27TS32
KV-27TS36
KV-32TS36
KV-32TS46
KV-27TW77
KV-27TW78
KV-32TW67
KV-32TW68
KV-32TW77
KV-32TW78
KV-2970M
KV-2975M

Owner's Record

The model and serial numbers are located at the rear of the TV. Record these numbers in the spaces provided below. Refer to them whenever you call upon your Sony dealer regarding this product.

Model No. _____ Serial No. _____

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Contents

Preface

This section tells you about special features, safety information, and preparatory information for using this manual.

Chapter 1: Setting Up

This section shows you the steps necessary for installing and presetting for TV, and how to connect optional video and audio equipment.

Chapter 2: Using Basic Features

This section gives you basic information about operating and adjusting your TV.

Chapter 3: Using Advanced Features

This section shows you how to use Picture-in-Picture, pre-programmed Remote Commander and other useful features.

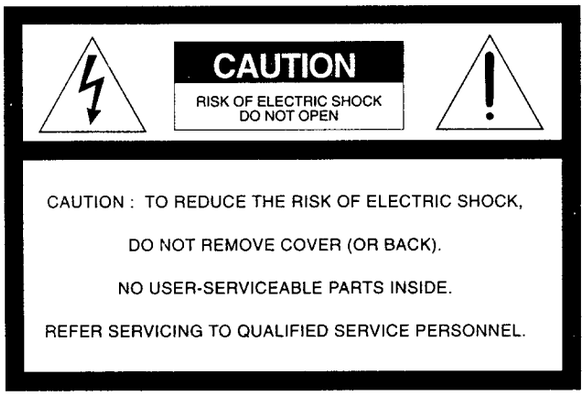
Appendix

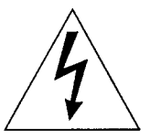
This section gives you specifications and troubleshooting information.

- For a detailed table of contents, see page 3.

WARNING

To prevent fire or shock hazard, do not expose the television to rain or moisture.


CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
CAUTION : TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

CAUTION:

TO PREVENT ELECTRIC SHOCK, DO NOT USE THIS POLARIZED AC PLUG WITH AN EXTENSION CORD, RECEPTACLE, OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

Note to CATV system installer

This reminder is provided to call the CATV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

Use of this television receiver for other than private viewing of programs broadcast on UHF or VHF or transmitted by cable companies for the use of the general public may require authorization from the broadcaster/cable company and/or program owner.

Precautions

Safety

- Operate the TV only on 120 V AC.
- One blade of the plug is wider than the other for safety purposes and will fit into the power outlet only one way. If you are unable to insert the plug fully into the outlet, contact your dealer.
- Should any liquid or solid object fall into the cabinet, unplug the TV and have it checked by qualified personnel before operating it any further.
- Unplug the TV from the wall outlet if you are not going to use it for several days or more. To disconnect the cord, pull it out by the plug. Never pull the cord itself.

Installing

- To prevent internal heat build-up, do not block the ventilation openings.
- Do not install the TV in a hot or humid place, nor in a place subject to excessive dust or mechanical vibration.

Cleaning

Clean the TV with a soft dry cloth. Never use strong solvents such as thinner or benzine which might damage the finish of the cabinet.

Repacking

Keep the original carton and packing materials to use for safe transport of your TV in the future.

If you have any questions or problems concerning your TV, please contact your nearest Sony dealer.

For details concerning safety precautions, see the supplied leaflet "IMPORTANT SAFEGUARDS."

CAUTION:

When using TV games, computers, and similar products with your TV, keep the brightness and contrast functions at low settings. If a fixed (non-moving) pattern is left on the screen for long periods of time at a high brightness or contrast setting, the image can be permanently imprinted onto the screen. These types of imprints are not covered by your warranty because they are the result of misuse.

This television receiver provides display of television closed captioning in accordance with § 15.119 of the FCC rules.

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Introducing the Sony Trinitron® Color TV

About the manual

This manual covers 13 different models. The menu displays are based on model KV-32TS36, one of the models with the most functions, and the Remote Commander illustrations are based on RM-Y118. If a particular function does not apply to your model, this will be noted in the manual.

We highly recommend that you read this manual before using your TV. Keep the manual handy for future reference.

Features

With the following features, you can:

- Receive up to 125 cable channels for a total of 181 possible off-air cable channels with the **multi-band VHF/UHF/CATV tuner.**
- Receive the picture and sound of your VCR through the **VIDEO IN jacks.**
- Receive superior VCR playback pictures when you connect a VCR equipped with an S video output jack to the **S VIDEO IN jack.**
- Watch your portable camera images (8mm, video, etc.) by connecting to the **VIDEO IN jacks** on the front panel.
- Receive stereo programs and Second Audio Program (SAP) broadcasts with the built-in **Multichannel TV Sound (MTS) decoder.**
- Receive TV or video sound through an audio system by connecting to the **VARIABLE/FIX AUDIO OUT jacks.**
- Simulate the sound quality of a concert hall or movie theater with the **SURROUND system.**
- Watch another TV channel, video or cable image as a window picture by using **Picture-in-Picture.**
- Automatically preset all receivable channels with **AUTO PROGRAM.**
- Watch the closed caption and the text by using **Closed Caption.**

With the supplied Remote Commmander, you can:

- Operate the TV, plus Sony and most other maker's video equipment or Sony multi-disc player with the **Pre-Programmed feature.**
- Switch quickly between two channels by using **JUMP.**
- Set the TV to automatically shut off after desired time (30, 60, 90 minutes can be set) using the **SLEEP** timer.
- Set the internal clock to display the **CURRENT TIME** on-screen.

And enjoy other features giving you a high quality picture...

- **Colorpure Filter™** produces fine picture detail without color spill or color noise.
- The **New Dynamic Picture™ system** adjusts picture contrast automatically to produce more detail in both bright and dark areas of every scene.

Identifying your TV

Check the model number of your TV set.

There are slight differences among 13 models covered by this manual.

Check the table below to see what your TV is equipped with before you start operating it.

Table of models
YES: equipped
NO: not equipped

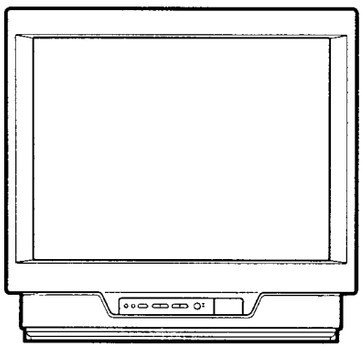
	KV-27TS36, KV-29TV7	KV-32TS36, KV-32TW67, KV-32TW68, KV-32TW77, KV-32TW78, KV-29TS46, KV-29TW67, KV-29TW68, KV-29TW77, KV-29TW78, KV-2975M
Picture-in-Picture feature	NO	YES
Pre-Programmed feature	NO	YES
SURROUND system	YES	YES
Front panel A/V jacks	NO	YES
S VIDEO IN jacks	NO	YES
Remote Commander	RM-Y116	RM-Y117	RM-Y118

	KV-27TS29, KV-27TS36, KV-32TS36, KV-32TS46	KV-32TS36, KV-32TW67, KV-32TW68, KV-32TW77, KV-32TW78	KV-2970M, KV-2975M
Model destination	U.S.A./Canada	U.S.A./ CANADA	U.S.A.	Central South America and other areas
Closed caption	YES*	YES	YES	NO
Dual language	NO	YES	NO	YES

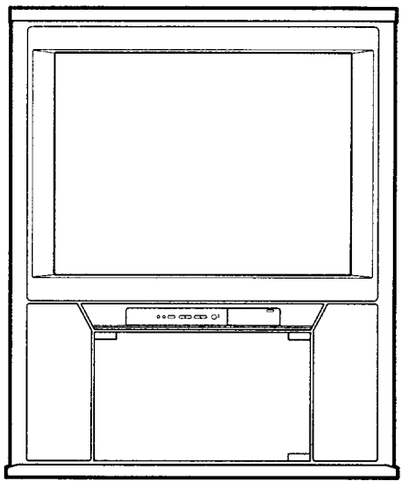
*U.S.A. models only

Design

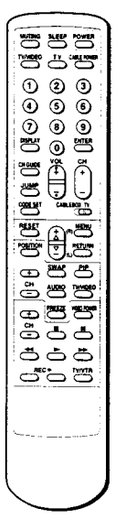
KV-27TS29 KV-32TS36
KV-27TS32 KV-32TS46
KV-27TS36 KV-2975M
KV-2970M



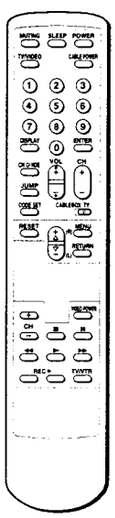
KV-27TW77 (Natural wood finish)
KV-27TW78 (Black)
KV-32TW67 (Natural wood finish)
KV-32TW68 (Black)
KV-32TW77 (Natural wood finish)
KV-32TW78 (Black)



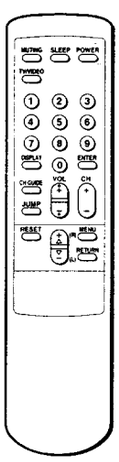
RM-Y118



RM-Y117



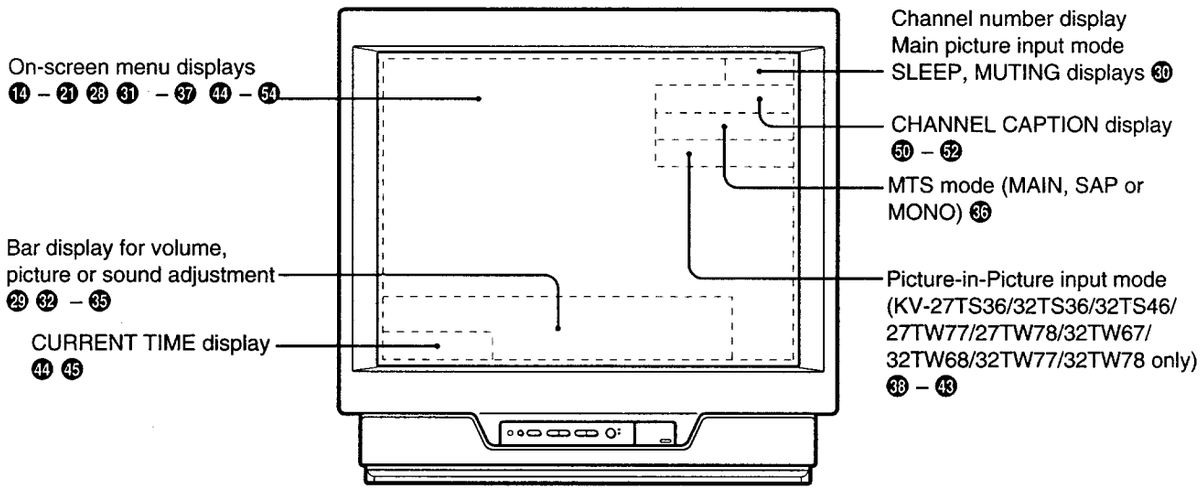
RM-Y116



Locating the Controls

Screen Displays

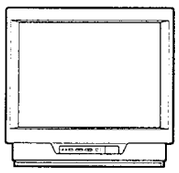
For details, see the pages indicated by the numbered black circles ●.


On-screen menu displays
⓮ – ㉑ ㉘ ㉛ – ㊲ ㊹ – ㊾
Bar display for volume, picture or sound adjustment
㉙ ㉜ – ㉟
CURRENT TIME display
㊹ ㊺
Channel number display
Main picture input mode
SLEEP, MUTING displays ㉚
CHANNEL CAPTION display
㊿ – ㊿
MTS mode (MAIN, SAP or MONO) ㊱
Picture-in-Picture input mode (KV-27TS36/32TS36/32TS46/ 27TW77/27TW78/32TW67/ 32TW68/32TW77/32TW78 only)
㊳ – ㊸

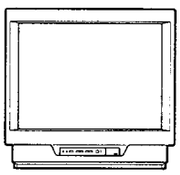
KV-32TS36
(The screen displays, except for certain features as noted above, are the same for all models.)

Front Panel

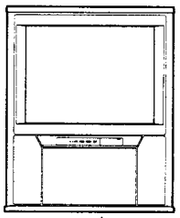
KV-27TS29
KV-2970M

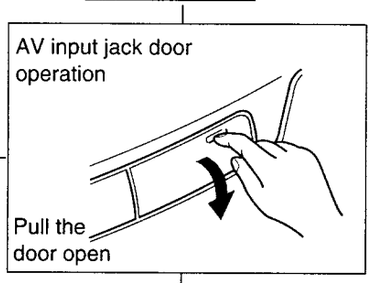


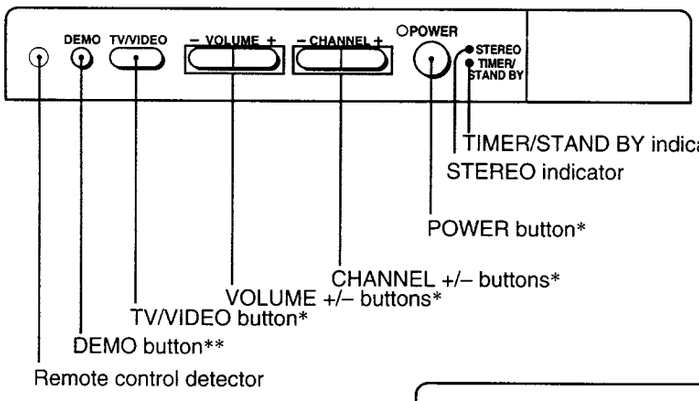
KV-27TS32 **KV-27TS36**
KV-32TS36 **KV-32TS46**
KV-2975M

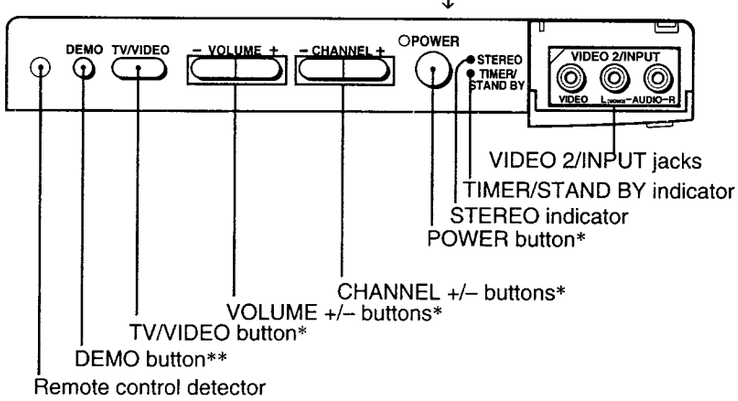


KV-27TW77 **KV-27TW78** **KV-32TW67**
KV-32TW68 **KV-32TW77** **KV32TW78**







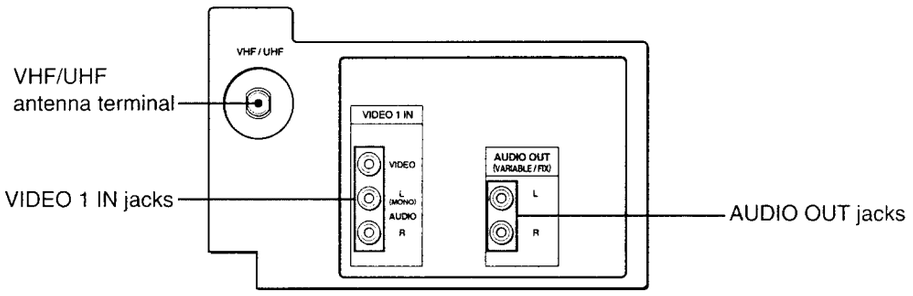


* Buttons with the same function are also located on the Remote Commander (pp. 10 – 11).

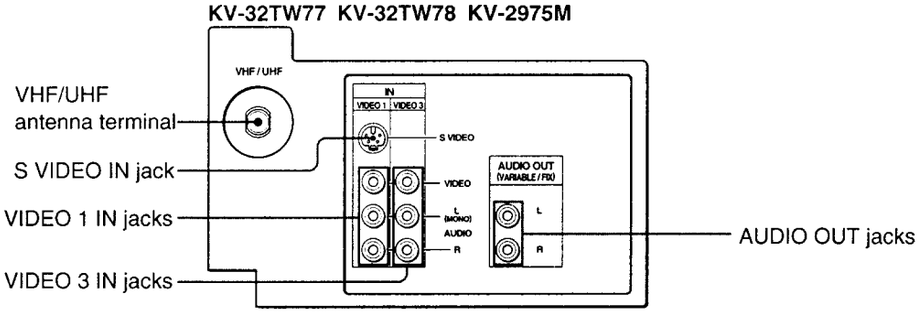
** If you press this button, functions and menus are displayed one by one. Press any button to stop DEMO.

Rear Panel

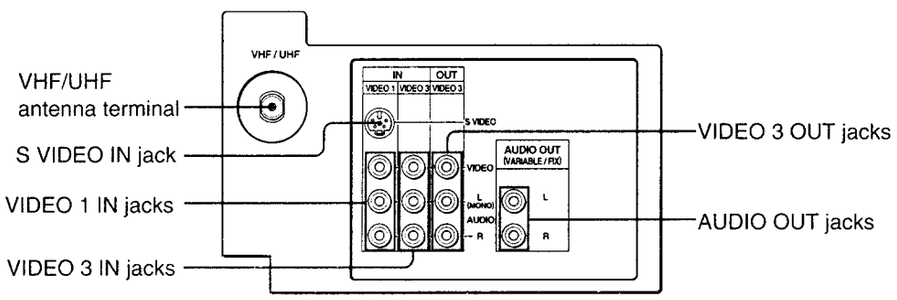
KV-27TS29 KV-2970M



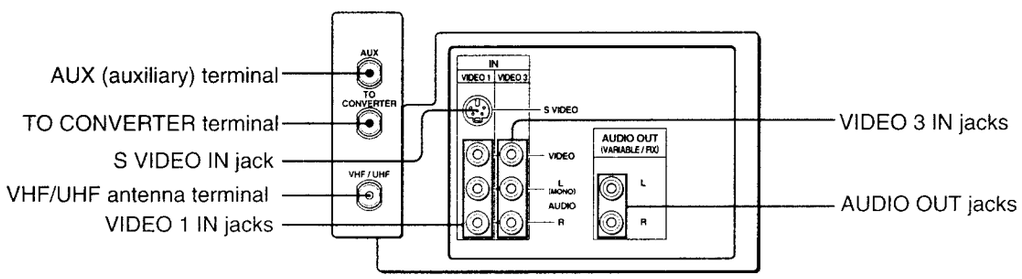
KV-27TS36 KV-32TS36 KV-27TW77
KV-27TW78 KV-32TW67 KV-32TW68
KV-32TW77 KV-32TW78 KV-2975M



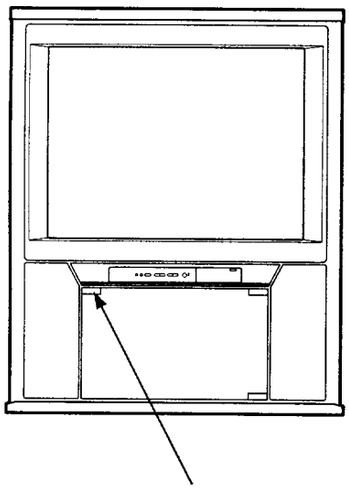
KV-27TS32



KV-32TS46



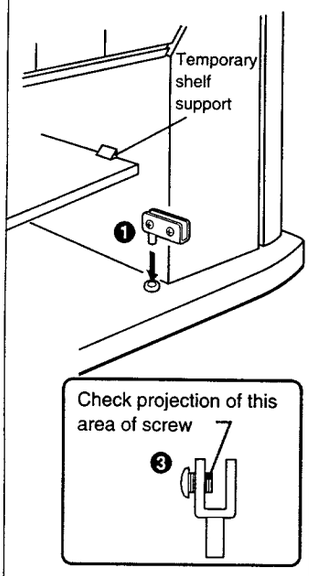
Installing the Glass Door and VCR Shelf (KV-27TW77/27TW78/32TW67/32TW68/32TW77/32TW78 only)



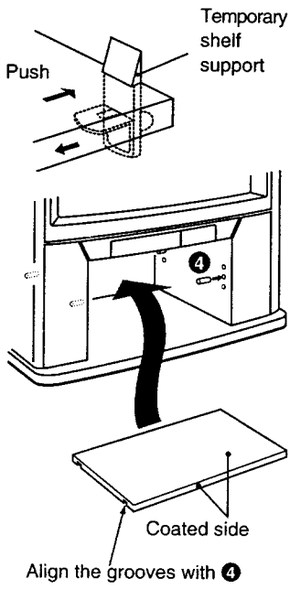
Push here to close.
To open, push again.

❶	Bottom Hinge		1
❷	Top Hinge		1
❸	Screw 4 × 4		4
❹	Metal pin		4
❺	Plate pad		1
❻	Push plate		1

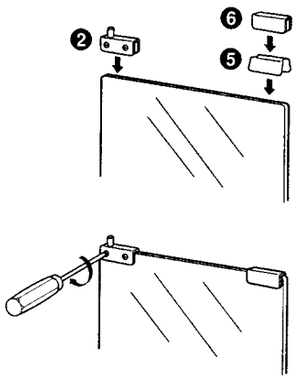
1 Check that the projection of the screw through the hinge allows for proper installation of the hinge to the glass, then insert the bottom hinge ❶ into the bushing located on the cabinet bottom.



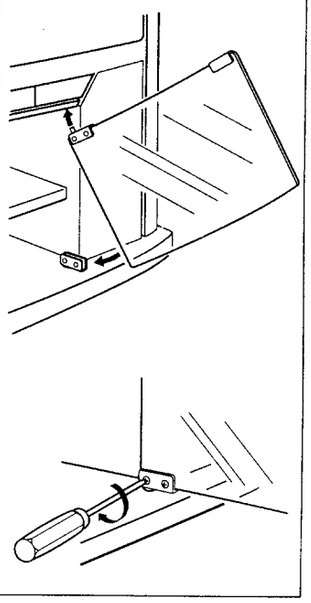
2 Press the upper part of the temporary shelf supports and detach the shelf. Insert the metal pin shelf supports ❹ and, aligning the grooves with the supports, insert the shelf.



3 Attach the top hinge ❷ to one end of the glass door, and tighten the screws. Attach plate pad ❺ to the other end then push plate ❻ over the plate pad.

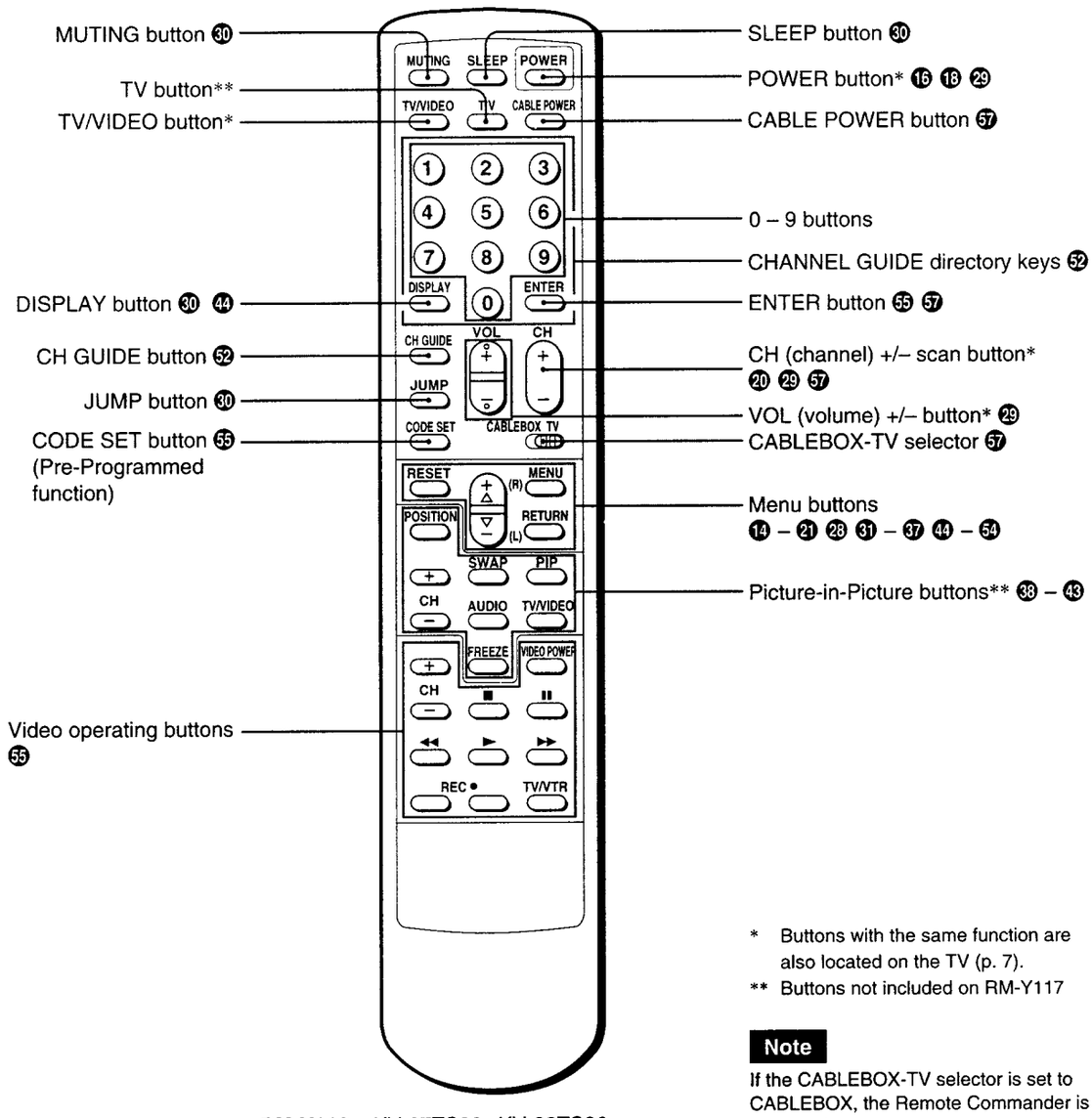


4 Pushing the glass door hinge up into the hole located on the cabinet ceiling, slide the door into the bottom hinge, then tighten the screws.



Remote Commander

For details, see the pages indicated by the numbered black circles ●.

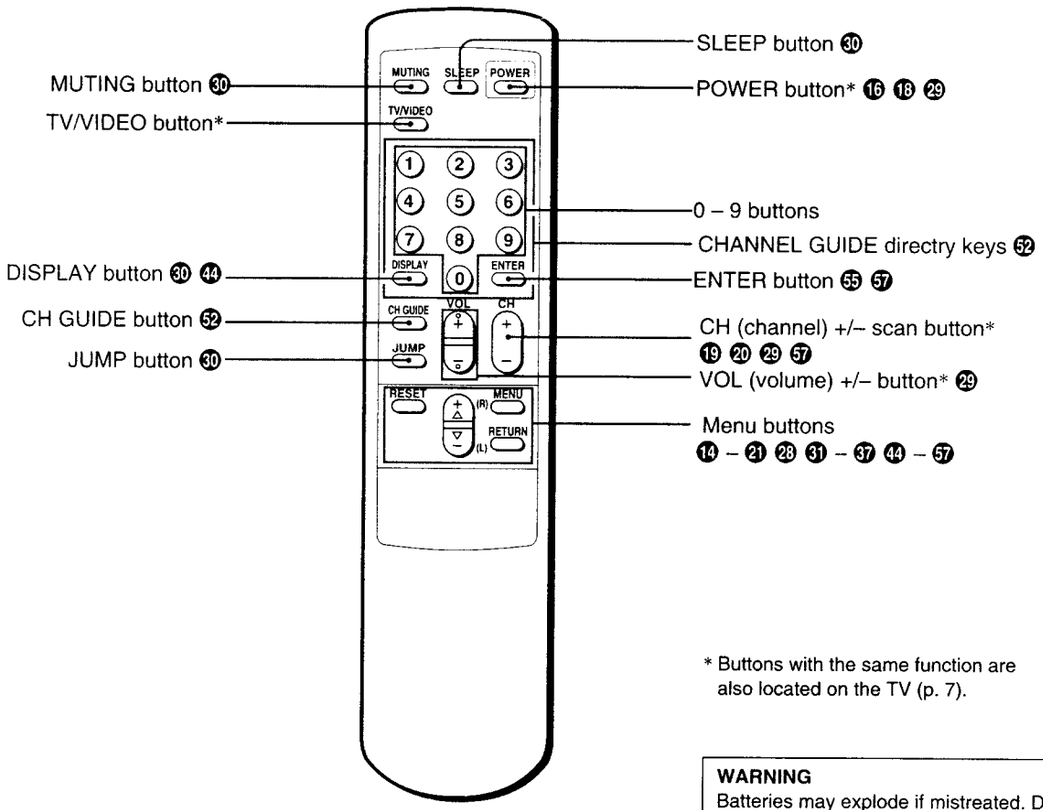


RM-Y118: KV-27TS36 KV-32TS36
KV-32TS46 KV-27TW77
KV-27TW78 KV-32TW67
KV-32TW68 KV-32TW77
KV-32TW78 KV-2975M
(**RM-Y117**: KV-27TS32)

* Buttons with the same function are also located on the TV (p. 7).
** Buttons not included on RM-Y117

Note

If the CABLEBOX-TV selector is set to CABLEBOX, the Remote Commander is able to control a connected cable box, not the TV . Set the selector to TV to control the TV set with the Remote Commander (You can use POWER button at any case).



RM-Y116: KV-27TS29
KV-2970M

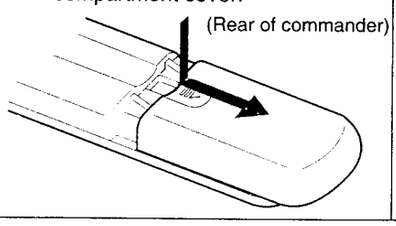
* Buttons with the same function are also located on the TV (p. 7).

WARNING
Batteries may explode if mistreated. Do not recharge, disassemble, or dispose of in fire.

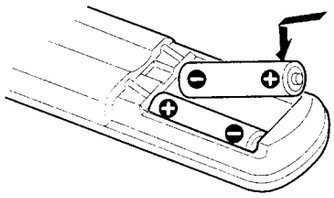
Installing Batteries

(RM-Y116)

1 Remove the battery compartment cover.

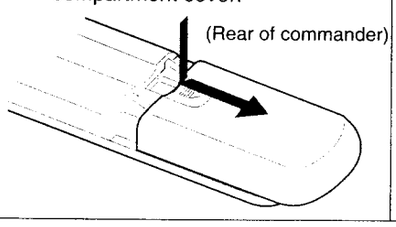


2 Insert two size AA (R6) batteries in correct polarity.

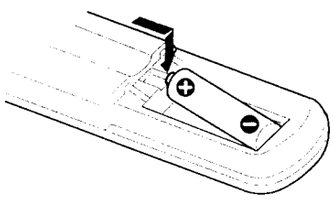


(RM-Y117, RM-Y118)

1 Remove the battery compartment cover.



2 Insert a size AA (R6) battery in correct polarity.



Battery life
With normal operation, batteries will last up to half a year. If the Remote Commander dose not operate properly, the batteries might be exhausted. Replace both of them with new ones.

To avoid damage from possible battery leakage
Remove the batteries if you do not plan to use the Remote Commander for a fairly long time.

Connecting TV Antenna/Cable

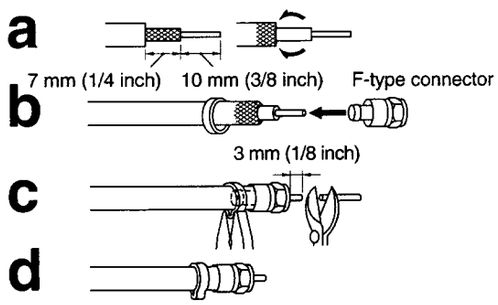
Although you can use either an indoor or outdoor antenna with the TV, an outdoor antenna will provide you with better picture quality. You can receive cable TV by connecting a cable supplied by your local cable company.

Connecting VHF, UHF or VHF/UHF Combination Antenna*, or CATV Cable

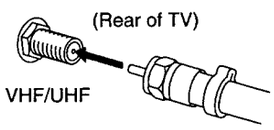
75-ohm coaxial cable (round)

1 Check your antenna cable type and prepare the end of the cable using the F-type connector.

Attach an F-type connector (not supplied).



2 Plug the connector into the VHF/UHF terminal at the rear of the TV.

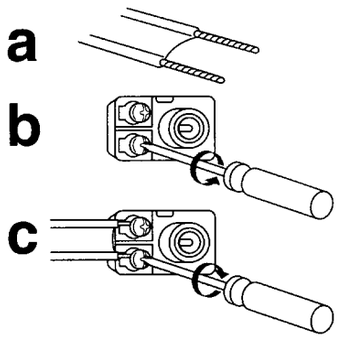


* Most combination antennas are equipped with a signal splitter.
Remove the splitter and attach the appropriate connector.

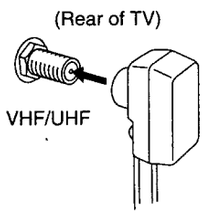
300-ohm twin-lead cable (flat)

1 Check your antenna cable type and prepare the end of the cable using the 300-ohm twin-lead cable.

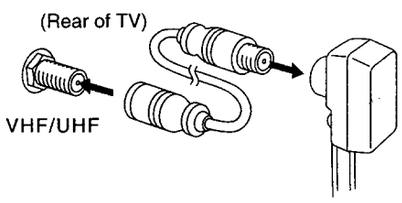
Attach an antenna connector (not supplied).



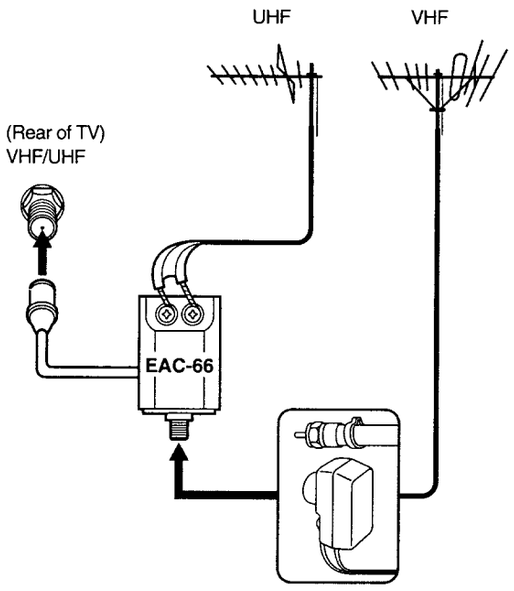
2 Plug the connector into the VHF/UHF terminal at the rear of the TV.



For better picture quality, connect optional antenna cable so that the 300-ohm twin-lead cable can be separated a distance from the TV.



Connecting both VHF and UHF antennas



Use an EAC-66 U/V mixer (not supplied).

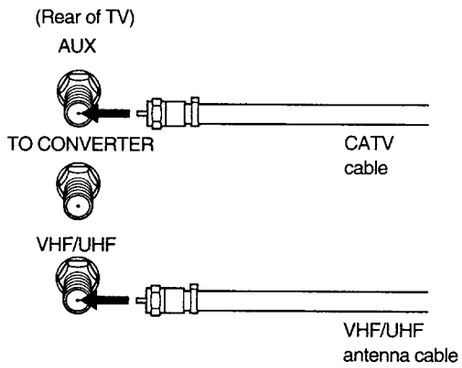
1 Prepare the VHF antenna cable using the appropriate connector (p.12).

2 Connect the cable to the U/V mixer.

3 Connect the U/V mixer to the VHF/UHF terminal.

When you use the U/V mixer
Snow and noise may appear in the picture when viewing cable TV channels over 37 (W+1).

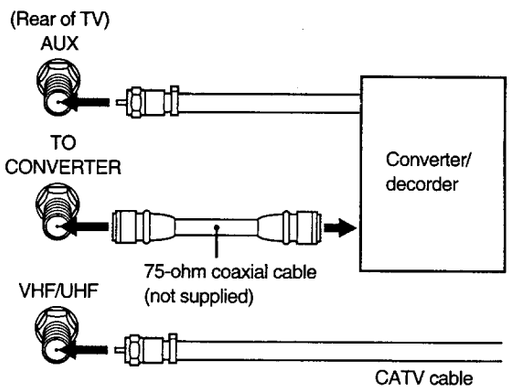
Connecting both VHF/UHF antennas and a CATV cable (KV-32TS46 only)



Note

Do not connect anything to the TO CONVERTER terminal in this case.

Connecting a cable with a pay cable TV system converter/decoder* (KV-32TS46 only)



Pay cable TV systems use scrambled or encoded signals require special converters (decoders) in addition to the normal cable connection.

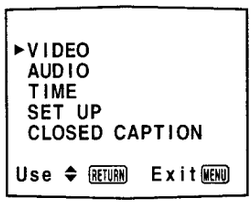
* The special converter/decoder will be supplied by the cable company.

Using the On-Screen Menus

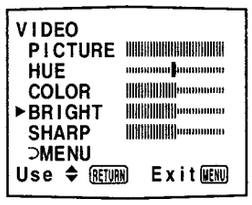
The following flow chart shows the different levels of on-screen menus that you can use to make various adjustments and settings. See the indicated pages for instructions on using each feature.

For picture quality adjustment

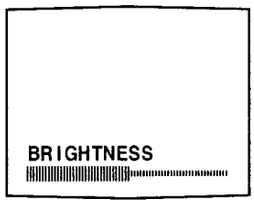
Main menu



VIDEO menu (pp. 32–33)

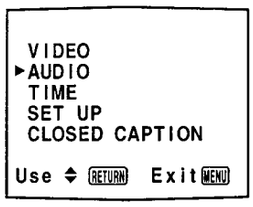


Adjustment bar

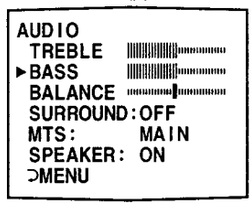


For sound quality adjustment

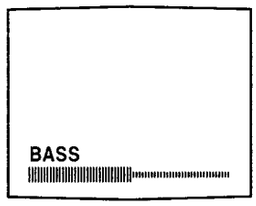
Main menu



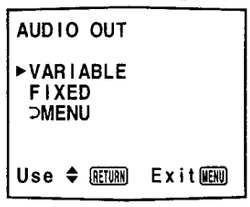
AUDIO menu (pp. 34–37)



Adjustment bar

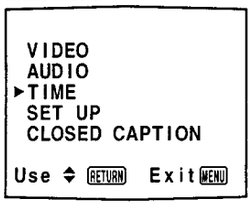


AUDIO OUT screen (p. 37)

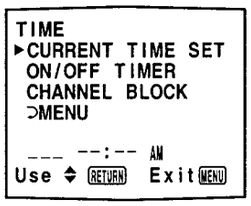


For time-related settings

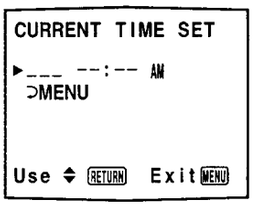
Main menu



TIME menu

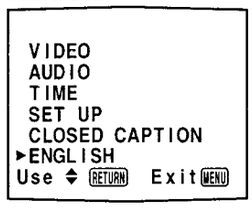


CURRENT TIME SET screen (pp. 44–45)

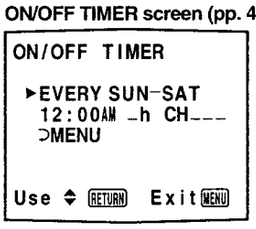


For language setting (p.16)
(KV-27TS32 only)

Main menu

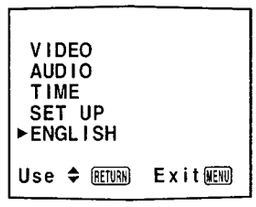


ON/OFF TIMER screen (pp. 46–47)

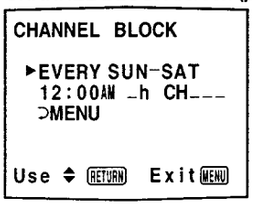


For language setting (p.16)
(KV-2970M/2975M only)

Main menu



CHANNEL BLOCK screen (pp. 48–49)



For presetting and other functions

Main menu

```
 VIDEO
 AUDIO
 TIME
▸SET UP
 CLOSED CAPTION

Use ◆ RETURN  Exit MENU
```

SET UP menu

```
SET UP
▸CABLE: ON
 AUTO PROGRAM
 CH ERASE/ADD
 CH CAPTION/GUIDE
 S VIDEO
 VIDEO LABEL
 ⊃MENU
```

CABLE ON/OFF screen (p. 17)

```
SET UP
▸CABLE: ON
 AUTO PROGRAM
 CH ERASE/ADD
 CH CAPTION/GUIDE
 S VIDEO
 VIDEO LABEL
 ⊃MENU
```

AUTO PROGRAM screen (p. 18)

```
AUTO PROGRAM
```

For closed caption setting

Main menu

```
 VIDEO
 AUDIO
 TIME
 SET UP
▸CLOSED CAPTION

Use ◆ RETURN  Exit MENU
```

CLOSED CAPTION screen (p. 31)

```
CLOSED CAPTION
▸CC/TEXT OFF
 CC1
 CC2
 TEXT1
 TEXT2
 ⊃MENU
Use ◆ RETURN  Exit MENU
```

CHANNEL ERASE/ADD screen (pp. 19–21)

```
CH ERASE/ADD
                10
 ▸ERASE
  ADD
  ⊃MENU

Select the channel
Use ◆ RETURN  Exit MENU
```

CHANNEL CAPTION/GUIDE screen (pp. 50–51)

```
CH CAPTION/GUIDE
 ① ② ③      ▸ ---
 ④ ⑤ ⑥        ----
 ⑦ ⑧ ⑨      ⊃
 DISP ⓪ ENT

Use ◆ RETURN  Exit MENU
```

S VIDEO ON/OFF screen (p. 28)

```
SET UP
 CABLE: ON
 AUTO PROGRAM
 CH ERASE/ADD
 CH CAPTION/GUIDE
▸S VIDEO: ON
 VIDEO LABEL
 ⊃MENU
```

VIDEO LABEL screen (pp. 53–54)

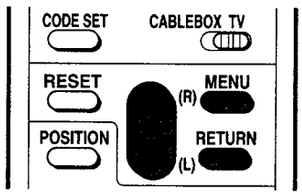
```
VIDEO LABEL

 ▸VIDEO1: VIDEO1
  VIDEO2: VIDEO2
  VIDEO3: VIDEO3
  ⊃MENU

 Use ◆ RETURN  Exit MENU
```

Navigating through the Menus

Remote Commander



To display the main menu
Press MENU.

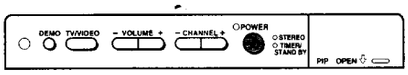
To return to the previous menu
Press △+ or ▽– to select "⊃ MENU."
Then press RETURN.

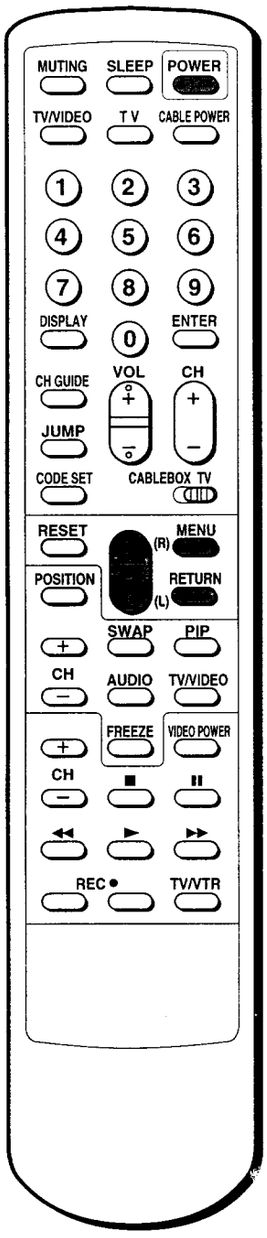
To return to the main menu
Repeat the above, until you reach the main menu.

To return to the normal screen
Press MENU on the Remote Commander.

Note

The menus disappear automatically if you do not press a button within 90 seconds.
The menu you cannot select appears in black.





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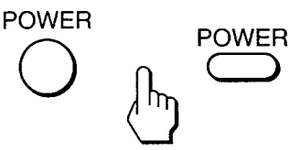
To return to the normal screen
Press MENU.

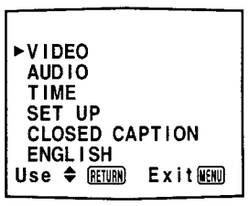
Changing the Menu Language (KV-27TS32/2970M/2975M only)

The menu language is factory-set to ENGLISH. Follow these instructions to change the menu language to Spanish or back to English.

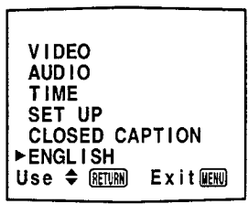
1 Press POWER on the TV or the Remote Commander to turn the TV on.



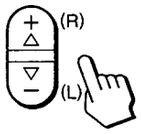
2 Press MENU.
The main menu appears.

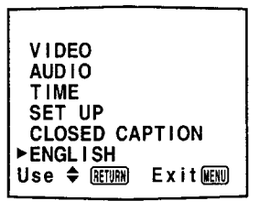


3 Press △+ or ▽– to select ENGLISH.
Then press RETURN.



4 Press △+ or ▽– to select language.
Each time you press △+ or ▽–, ESPAÑOL and ENGLISH menus appear.

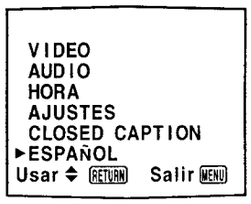




Note

Certain parts of the ESPAÑOL menus remain in English.

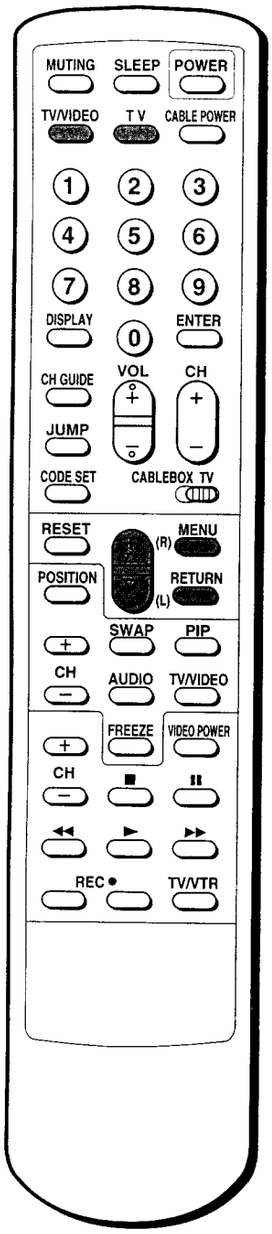
5 Press RETURN.
The language is selected.



Spanish menu

Turning the Cable Mode On or Off

All of the controls are on the Remote Commander.



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To return to the normal screen
Press MENU.

If you have cable connected to your TV (pp.12–13), follow the steps below to turn the cable connection on or off. CABLE is preset to ON when you use your TV for the first time. Then turn CABLE to OFF to preset or watch VHF or UHF channels (pp.18-21 and 29).

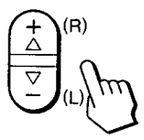
1 Press MENU.
The main menu appears.

MENU

```
▶VIDEO
 AUDIO
 TIME
 SET UP
 CLOSED CAPTION

Use ♦ RETURN  Exit MENU
```

2 Press △+ or ▽– to select SET UP.




```
 VIDEO
 AUDIO
 TIME
▶SET UP
 CLOSED CAPTION

Use ♦ RETURN  Exit MENU
```

Press RETURN.
The SET UP menu appears, and the cursor points to "CABLE".

RETURN

```
SET UP
▶CABLE: ON
 AUTO PROGRAM
 CH ERASE/ADD
 CH CAPTION/GUIDE
 S VIDEO
 VIDEO LABEL
 ↻MENU
```

Note

If the CABLE display appears in black, the TV is in VIDEO mode and you cannot select CABLE. Press TV or TV/VIDEO to change to TV mode.

3 Press RETURN again.

RETURN

```
SET UP
▶CABLE: ON
 AUTO PROGRAM
 CH ERASE/ADD
 CH CAPTION/GUIDE
 S VIDEO
 VIDEO LABEL
 ↻MENU
```

Press △+ or ▽– to select ON or OFF alternately.

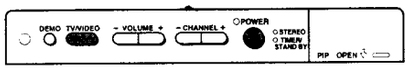
```
SET UP
▶CABLE: ON
 AUTO PROGRAM
 CH ERASE/ADD
 CH CAPTION/GUIDE
 S VIDEO
 VIDEO LABEL
 ↻MENU
```

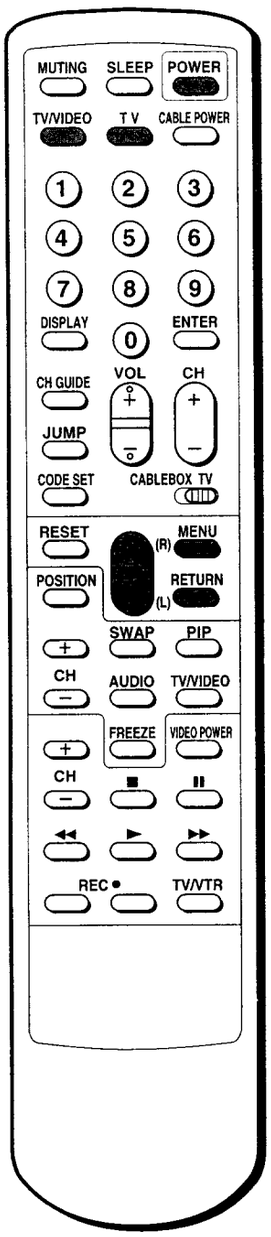
↔

```
SET UP
▶CABLE: OFF
 AUTO PROGRAM
 CH ERASE/ADD
 CH CAPTION/GUIDE
 S VIDEO
 VIDEO LABEL
 ↻MENU
```

Press RETURN.
The setting is completed.

Presetting TV Channels





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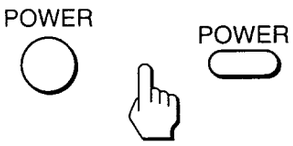
Channels that can be received on this TV:

VHF	UHF	CATV
2-13	14-69	1-125

Presetting TV Channels Automatically

1 Press POWER on the TV or the Remote Commander to turn the TV on.



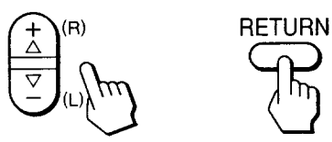
2 Set the cable connection on or off, depending on if you want to preset cable or VHF/UHF channels.
(Follow the steps in "Turning the Cable Mode On or Off", p.17)

3 Press MENU.
The main menu appears.

```
▸VIDEO
 AUDIO
 TIME
 SET UP
 CLOSED CAPTION

Use ♦ RETURN  Exit MENU
```

4 Press △+ or ▽– to select SET UP.
Then press RETURN.
The SET UP menu appears.

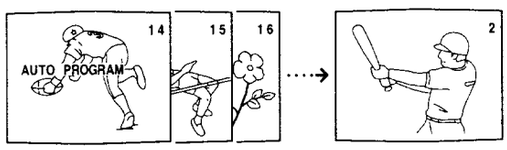



```
SET UP
▸CABLE: ON
 AUTO PROGRAM
 CH ERASE/ADD
 CH CAPTION/GUIDE
 S VIDEO
 VIDEO LABEL
 ↻MENU
```

Note

If the AUTO PROGRAM display appears in black, the TV is in video mode and you cannot select AUTO PROGRAM. Press TV or TV/VIDEO to change to TV mode.

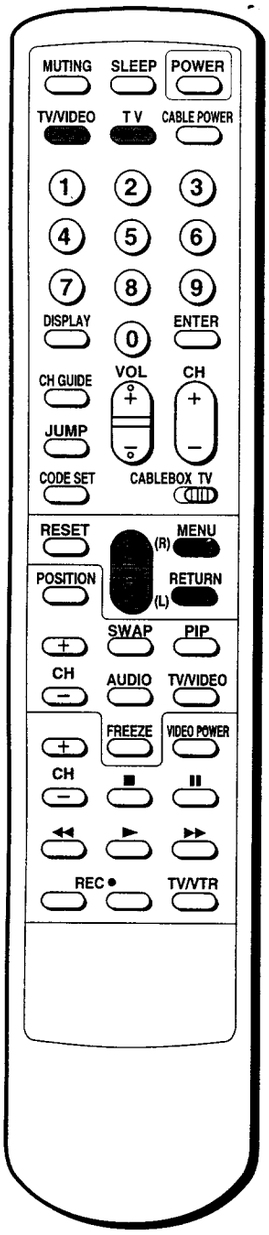
5 Press △+ or ▽– to select AUTO PROGRAM.
Then press RETURN.




```
SET UP
 CABLE: ON
▸AUTO PROGRAM
 CH ERASE/ADD
 CH CAPTION/GUIDE
 S VIDEO
 VIDEO LABEL
 ↻MENU
```

"AUTO PROGRAM" appears on the screen and receivable channels (other than the channels already preset) are preset in numerical sequence. The channels previously preset will not remain in the TV's memory.
When no more channels can be found, the programming stops and the lowest numbered channel is displayed.

To erase unnecessary channels, or to add channels that could not be preset automatically because their signal was too weak, follow the steps in "Erasing Unnecessary Channels — CHANNEL ERASE" (pp.19–20) and "Presetting Only Desired Channels — CHANNEL ADD" (p. 21).



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Erasing Unnecessary Channels—CHANNEL ERASE

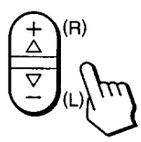
Use this feature to erase unnecessary TV channels, so that when you press CH +/–, the channel(s) are skipped.

1 Press MENU.
The main menu appears.

MENU

```
►VIDEO
 AUDIO
 TIME
 SET UP
 CLOSED CAPTION

Use ♦ RETURN  Exit MENU
```

2 Press △+ or ▽– to select SET UP.



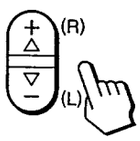

```
 VIDEO
 AUDIO
 TIME
►SET UP
 CLOSED CAPTION

Use ♦ RETURN  Exit MENU
```

Press RETURN.
The SET UP menu appears.

RETURN

```
SET UP
►CABLE: ON
 AUTO PROGRAM
 CH ERASE/ADD
 CH CAPTION/GUIDE
 S VIDEO
 VIDEO LABEL
 ↩MENU
```

3 Press △+ or ▽– to select CH ERASE/ADD.




```
SET UP
 CABLE: ON
 AUTO PROGRAM
►CH ERASE/ADD
 CH CAPTION/GUIDE
 S VIDEO
 VIDEO LABEL
 ↩MENU
```

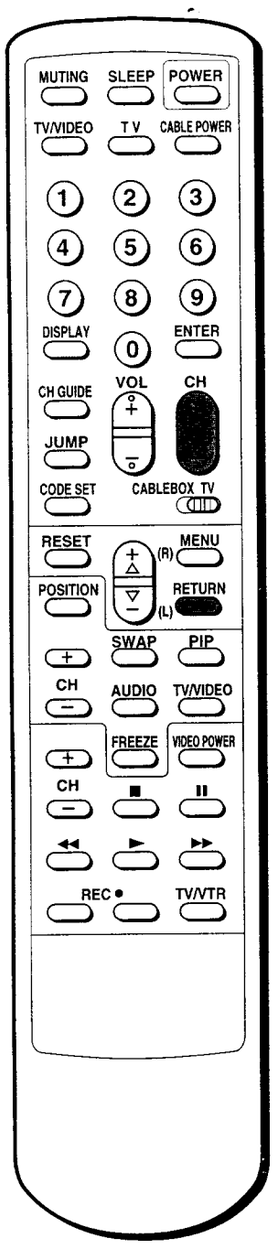
Press RETURN.
The CH ERASE/ADD screen appears, and the cursor points to "ERASE".

RETURN

```
CH ERASE/ADD
                10
  ►ERASE
   ADD
   ↩MENU

Select the channel
Use ♦ RETURN  Exit MENU
```

Note

If CH ERASE/ADD display appears in black, the TV is in video mode and you cannot select CH ERASE/ADD.
Press TV or TV/VIDEO to change to TV mode.



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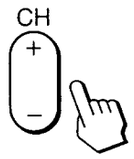
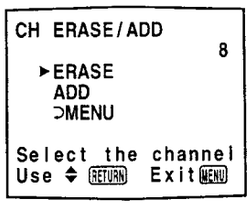
To return to the normal screen
Press MENU.

Note

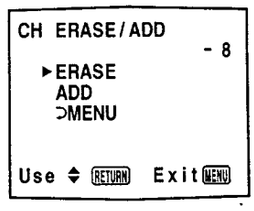
When you erase a VHF or UHF channel, the cable TV channel with the same number is also erased, and vice versa.

4 Press the CH +/– button to select the channel you want to erase.
For example, to erase channel 8, press CH +/– until 8 appears.





Press RETURN.
A "–" sign appears in front of the channel number display, indicating that the channel is erased from the channel scan memory.



The next time you press the CH +/– buttons, channel 8 will be skipped.

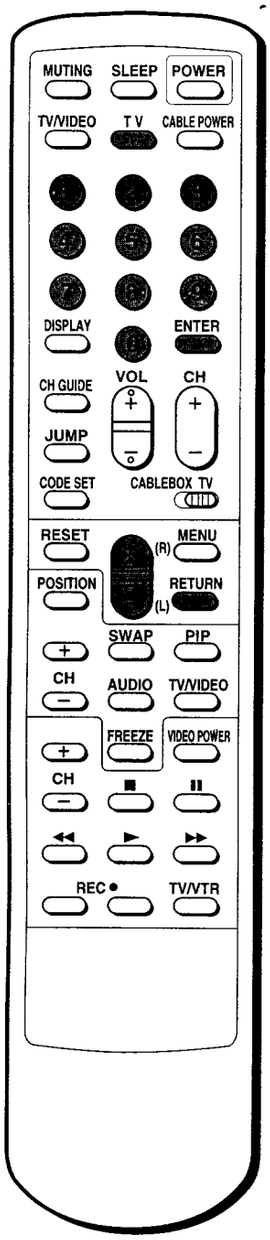
To erase other channels
Repeat step 4.

Cable TV channel chart*
Cable TV systems use letters or numbers to designate channels. To tune in a channel, refer to the chart below.

1	A-8
5	A-7
6	A-6
14	A
15	B
16	C
17	D
18	E
19	F
20	G
21	H
22	I
23	J
24	K
25	L
26	M
27	N
28	O
29	P
30	Q
31	R
32	S

33	T
34	U
35	V
36	W
37	W+1
38	W+2
39	W+3
⋮	⋮
93	W+57
94	W+58
95	A-5
96	A-4
97	A-3
98	A-2
99	A-1
100	W+59
101	W+60
102	W+61
⋮	⋮
123	W+82
124	W+83
125	W+84

* This designation of cable TV channels conforms to the EIA/NCTA recommendation. Check with your local cable TV company for more complete information on the available channels.



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To return to the normal screen
Press MENU.

Note

If you add a VHF or UHF channel, the cable TV channel with the same number is also added, and vice versa.

Presetting Only Desired Channels—CHANNEL ADD

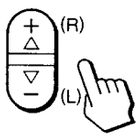
Use this feature to add channels one by one to the channel scan memory.

1-3 (Follow steps 1–3 in "Erasing Unnecessary Channels—CHANNEL ERASE," p.19.)

Note

If the CH ERASE/ADD display appears in black, the TV is in video mode and you cannot select CHANNEL ERASE/ADD.
Press TV or TV/VIDEO to change to TV mode.

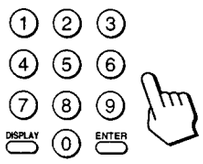
4 Press △ + or ▽ – to select ADD.




```
CH ERASE/ADD
                10
   ERASE
 ▶ADD
  ↄMENU

Select the channel
Use ⬍ RETURN  Exit MENU
```

5 Press 0–9 and ENTER to select the channel you want to add.
For example, to add channel 25, press 2, 5 and ENTER.




```
CH ERASE/ADD
                25
   ERASE
 ▶ADD
  ↄMENU

Select the channel
Use ⬍ RETURN  Exit MENU
```

Press RETURN.
A "+" sign appears in front of the channel number display, indicating that the channel is added to the channel scan memory.

```
CH ERASE/ADD
               +25
   ERASE
 ▶ADD
  ↄMENU


Use ⬍ RETURN  Exit MENU
```

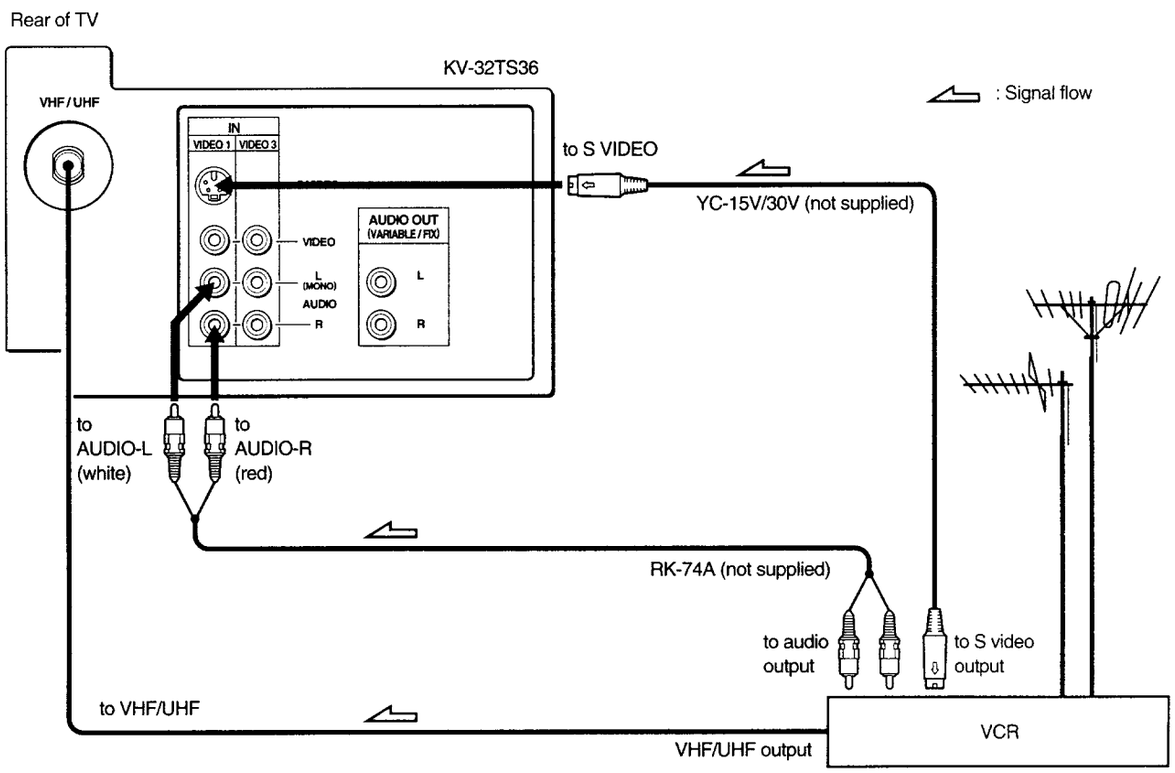
To add other channels
Repeat step 5.

Connecting Other Equipment

Video Equipment

After connecting, you will be able to... — Play back video tapes
— Watch two TV programs at once using a window picture (Picture-in-Picture, pp. 38-43)

Connecting a VCR with an S video output jack (except for KV-27TS29)



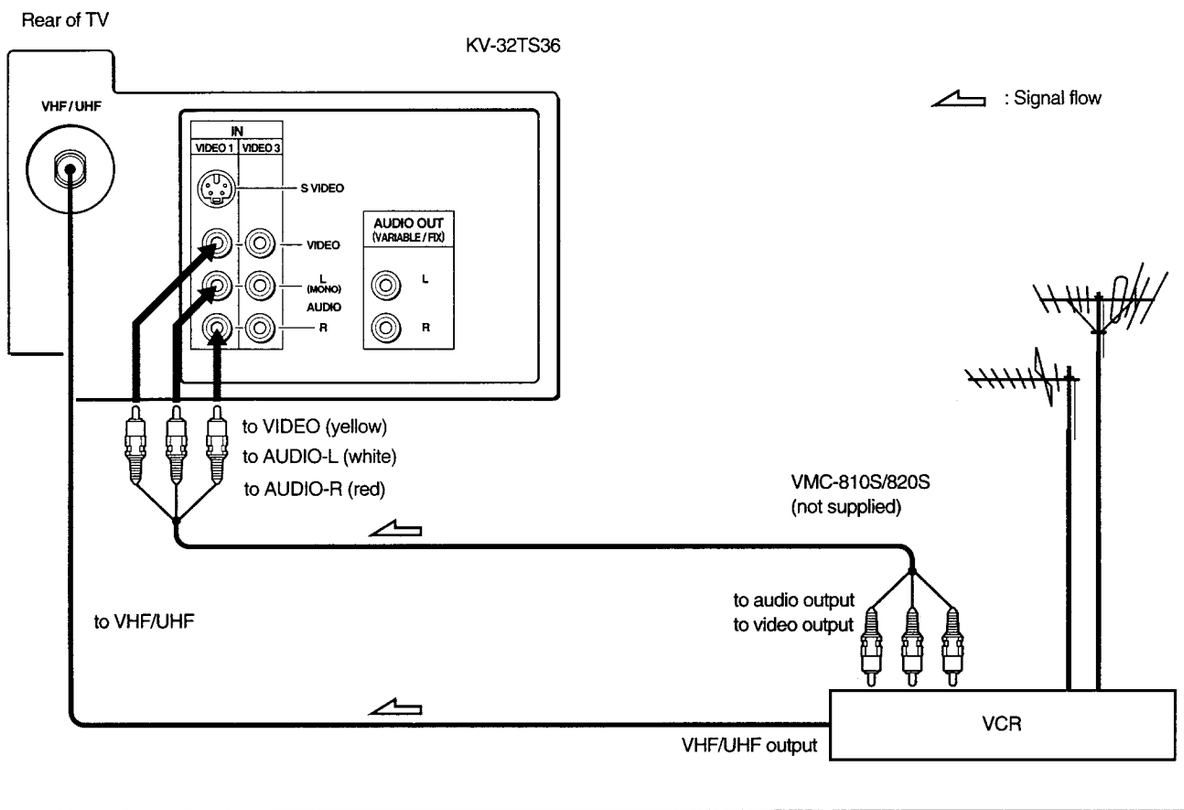
Notes

- If you connect a monaural VCR, connect the audio output of the VCR to the L (MONO) jack of VIDEO 1 IN on the TV. The monaural sound will be heard from both speakers.
- For operating instructions, refer to the instruction manual furnished with the VCR.
- If the picture or sound is affected, move the VCR away from the TV.
- If S VIDEO is set to OFF, you cannot watch VCR playback pictures from the S VIDEO IN. To set S VIDEO to ON, see "Watching a Video with Your S Video-Equipped VCR", p.28.

About S video input

Video input and output signals can be separated into Y (luminance or brightness) and C (chroma or color) signals. Usually these two signals are combined in a VCR and sent as one signal to a TV. Separation of the Y and C signals prevents them from interfering with one another, thereby inproving picture (especially color) quality.
This TV is equipped with an S video input jack through which these separated signals can be input directly. This way you can connect your S video-equipped VCR separately from a non-S video VCR.

Connecting video equipment not equipped with an S video output jack



Preparing for use

1 Turn on the TV.

2 Press the TV/VIDEO button on the TV or on the Remote Commander so that VIDEO appears on the screen.

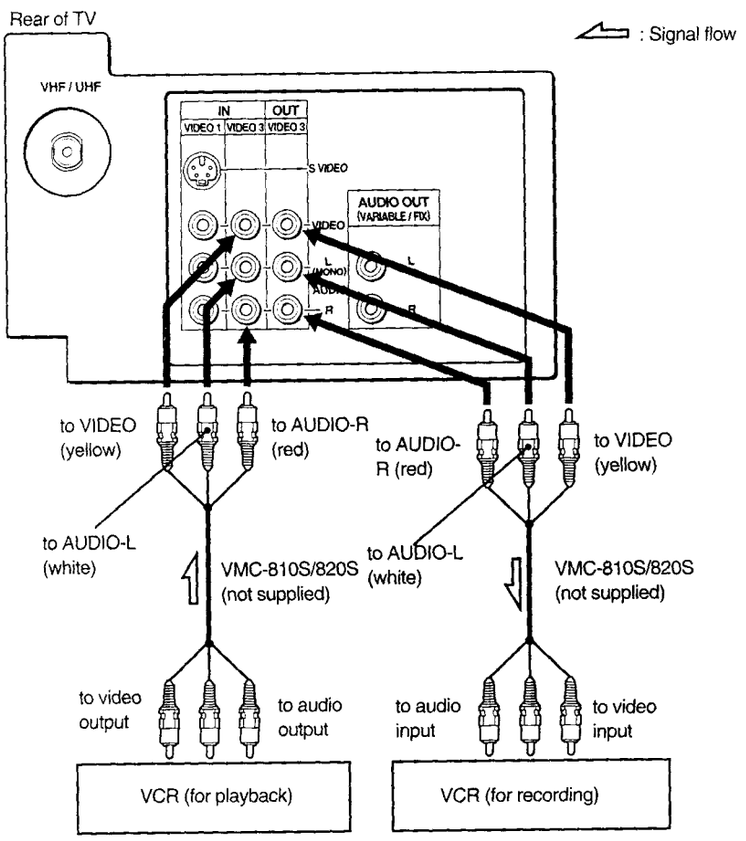
When you cannot obtain a clear picture and/or sound
Make sure that the TV/VTR on the VCR is set to TV. Reselect the channel you want to view with the controls on the TV or the Remote Commander.

Operating your equipment (except for KV-27TS29/ 2970M)

When using a Sony VCR, Multi-disc player or other manufacture's infrared remote control VCR, you can operate most of the equipments by using the supplied pre-programmed Remote Commander (p. 55).

To return to TV mode
Press the TV or TV/VIDEO button so that a channel number appears on the screen.

Connecting two VCRs for tape editing (KV-27TS32 only)



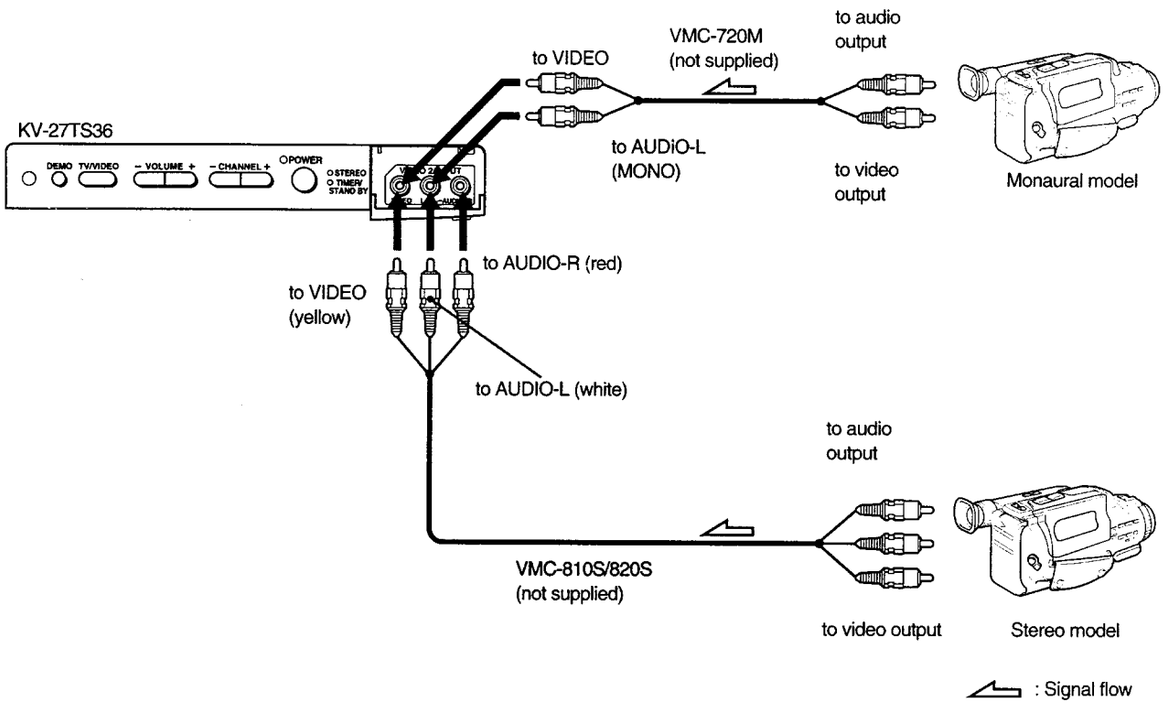
Watching a different image while duplicating

You can duplicate your recorded tapes by connecting two VCRs.
The VIDEO 3 OUT jacks only output the signal from the VIDEO 3 IN jacks. Connect a VCR for playback to VIDEO 3 IN jacks, and a VCR for recording to the VIDEO 3 OUT jacks. You can watch a TV program or images from VIDEO 1 IN or VIDEO 2 IN during duplicating.

To watch a different input image
Press TV/VIDEO on the TV or on the Remote Commander to select the input image you want to watch.

Connecting camcorders (except for KV-27TS29/2970M)

Playing back recorded tapes

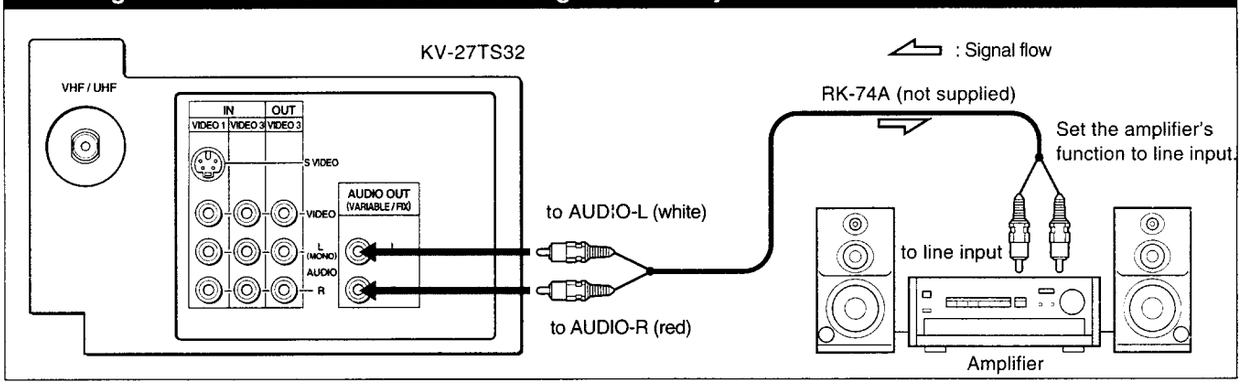


Preparing for use

Same as p. 23.

Audio System

Listening to TV or connected VCR sound through an audio system



Preparing for use

Display the mode set menu and set SPEAKER to OFF to cut off the TV speaker sound (p. 37), and listen to the TV's sound solely through the audio system speakers.

Note

By setting AUDIO OUT variable, you can adjust the bass, treble and balance, or select surround or an MTS (Multichannel TV Sound) mode, using the on-screen menus (pp. 34–36).

Connecting active super woofer (supplied with KV-32TS46 only)

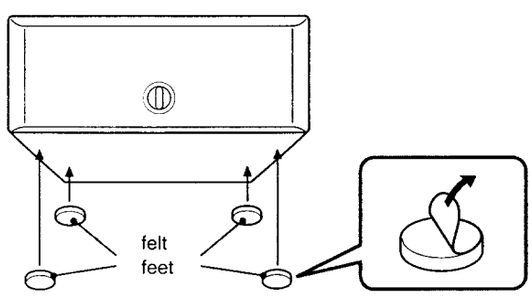
Preparing for use

To enjoy the active super woofer sound, make sure the connections are made as illustrated on the next page.

The woofer volume varies according to the TV volume. Adjust the woofer level control properly.

The active super woofer outputs the signal input to its AUDIO IN jacks. If you connect an audio system to the active super woofer's AUDIO OUT jacks, you can enjoy the sound from the audio system and the active super woofer simultaneously.

To make the active super woofer stable, attach the felt feet (supplied) to the bottom.

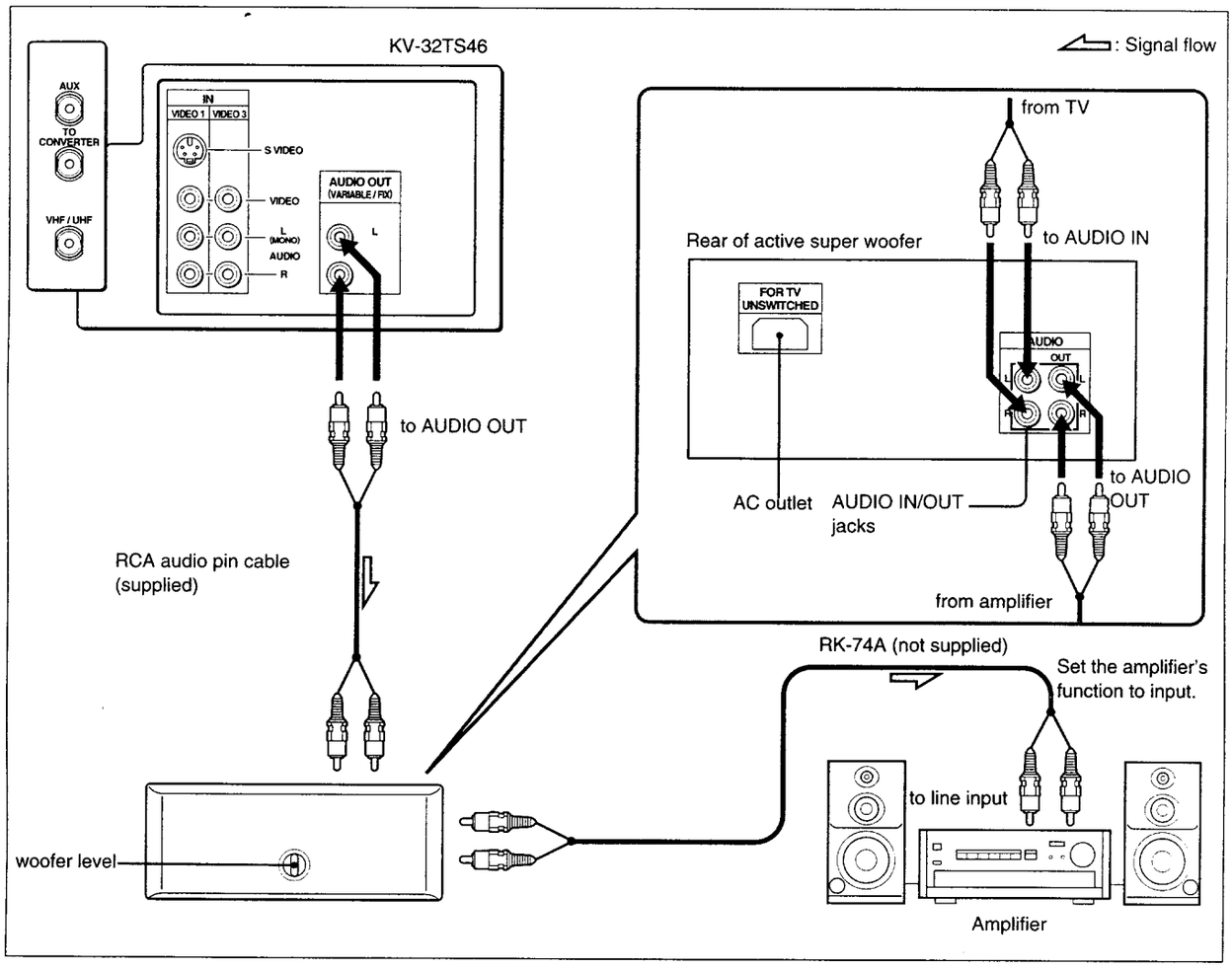


Notes

- Do not place the woofer on the TV set. To enjoy good sound, place the woofer on a hard object near the TV avoiding soft objects like carpets, sofas, etc.
- If you do not use the TV for more than 20 seconds, the active super woofer is turned off automatically to save on power consumption.
- When you release MUTING, the sound of the woofer is heard before that of the TV. This is normal.
- If you set SPEAKER to OFF in the AUDIO menu and select FIX in the AUDIO OUT menu (p.37), the volume of the woofer may be excessive. We recommend that you set SPEAKER to ON when you use the active super woofer.
- You should only connect the KV-32TS46 to the AC outlet on the active super woofer.

Active Super Woofer Specification

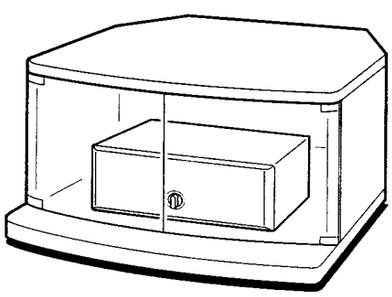
Input:	500 mVrms (100% modulation)
Output:	500 mVrms (100% modulation)
Impedance:	20 kilohms
Speaker output:	9 W (100 Hz)
Dimensions:	435 × 165 × 164 mm (W × H × D) (17 1/4 × 6 1/2 × 6 1/2 in.)
Mass:	3.9 kg (8 lbs 10 oz)



Using TV stand

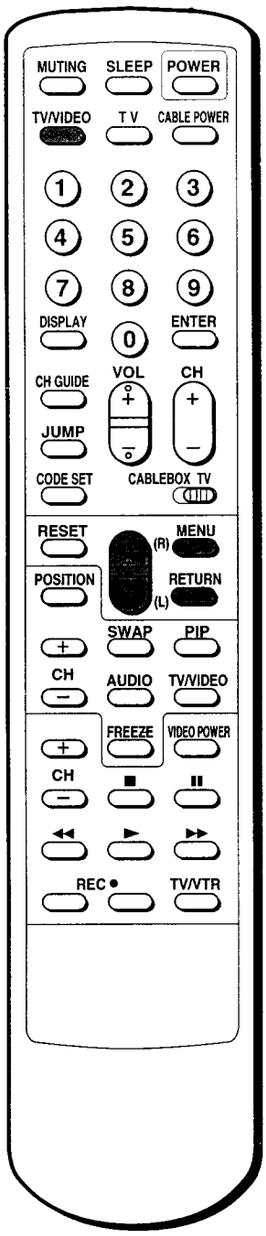
When you place the active super woofer on a TV stand (not supplied), remove the rear panel of the stand.

Sony or other manufacture's stand



Note

For good sound quality, avoid placing the stand in front of a curtain or close to a wall.



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To return to the normal screen
Press MENU.

Note

If you set S VIDEO to ON, the TV automatically receives S video signals whenever a VCR with S video is connected.

Watching a Video with Your S Video-Equipped VCR (except for KV-27TS29/2970M)

Use this feature to set S VIDEO to ON or OFF depending on the kind of video equipment you have connected to the TV. For instructions on connecting video equipment, see pp.22–25.

Note

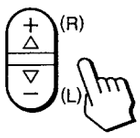
If the TV is in TV, VIDEO 2 or VIDEO 3 mode, the S VIDEO display appears in black and cannot be selected.
Press TV/VIDEO to change to VIDEO 1 mode.

1 Press MENU.
The main menu appears.

MENU

```
▸VIDEO
 AUDIO
 TIME
 SET UP
 CLOSED CAPTION

Use ◆ RETURN  Exit MENU
```

2 Press △+ or ▽– to select SET UP.



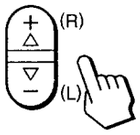

```
 VIDEO
 AUDIO
 TIME
▸SET UP
 CLOSED CAPTION

Use ◆ RETURN  Exit MENU
```

Press RETURN.
The SET UP menu appears.

RETURN

```
SET UP
▸CABLE: ON
 AUTO PROGRAM
 CH ERASE/ADD
 CH CAPTION/GUIDE
 S VIDEO: ON
 VIDEO LABEL
 ↩MENU
```

3 Press △+ or ▽– to select S VIDEO.
Then press RETURN.



RETURN

```
SET UP
 CABLE: ON
 AUTO PROGRAM
 CH ERASE/ADD
 CH CAPTION/GUIDE
▸S VIDEO: ON
 VIDEO LABEL
 ↩MENU
```

Press △+ or ▽– to select ON or OFF alternately.

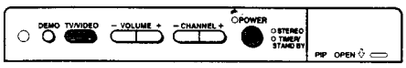
```
SET UP
 CABLE: ON
 AUTO PROGRAM
 CH ERASE/ADD
 CH CAPTION/GUIDE
▸S VIDEO: ON
 VIDEO LABEL
 ↩MENU
```

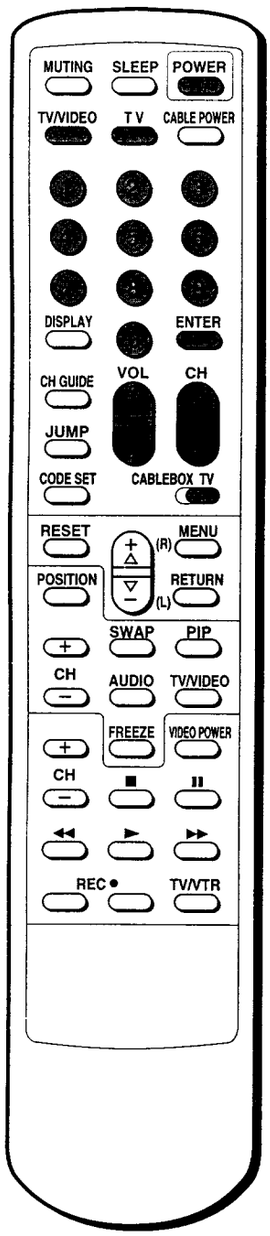
↔

```
SET UP
 CABLE: ON
 AUTO PROGRAM
 CH ERASE/ADD
 CH CAPTION/GUIDE
▸S VIDEO: OFF
 VIDEO LABEL
 ↩MENU
```

Press RETURN.
The setting is completed.

Watching TV Programs





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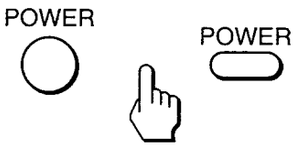
1 Press POWER on the TV or the Remote Commander to turn the TV on.
The TIMER/STAND BY indicator blinks until the picture appears.

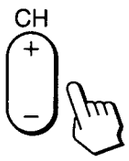


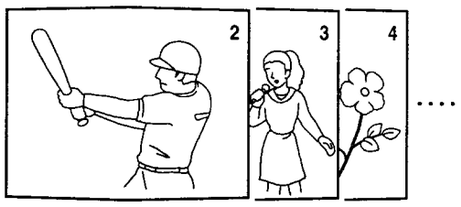
2 Turn the cable mode on or off to select the type of channel you want to watch, VHF/UHF or cable TV.
(Follow the steps in "Turning the Cable Mode On or Off," p. 17.)

If "VIDEO" or "S VIDEO" is displayed on the screen, press the TV or TV/VIDEO button so that the channel number appears.

3 Select a channel in one of the following two ways:

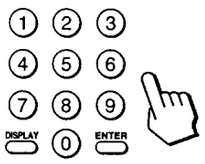
To scan the preset channels* in numerical sequence
Press CH +/–.

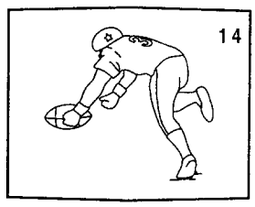




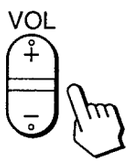
* For more information on presetting channels, see pp. 18 – 21.

To select a channel directly
Press 0 – 9 and ENTER.
For example, to select channel 14, press 1, 4 and ENTER.

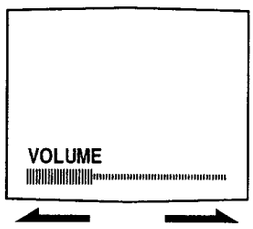




4 Press VOL +/– to adjust the volume.



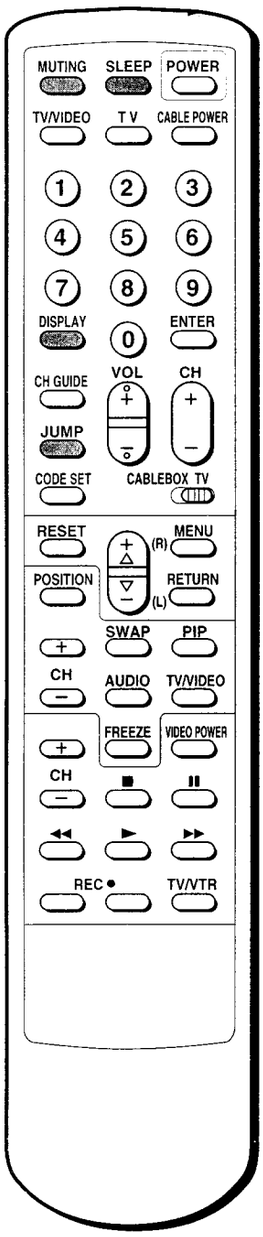
The display will disappear automatically after 3 seconds.



Press + to increase the volume.
Press – to decrease the volume.

To turn off the TV
Press POWER on the TV or the Remote Commander again.

Using Convenient Features



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Muting the Sound — MUTING

Press MUTING.
The display "MUTING" will appear on the screen.

MUTING

To restore the sound
Press MUTING again, or press VOL +.

Keeping the Displays On-Screen — DISPLAY

To display the channel
Press DISPLAY.
All the existing displays appear: channel number, channel caption (if set), MTS mode ("SAP" only), window picture input mode and the current time ("AM" or "PM" disappears after about three seconds).

DISPLAY

To cancel the display
Press DISPLAY again.
The channel display will disappear.

Using the Sleep Timer — SLEEP

The sleep timer turns off the TV automatically after the amount of time you select.

Press SLEEP.
Each time you press SLEEP, the time increments "30", "60", "90" and "OFF" mode appear in sequence.

SLEEP

SLEEP 30
SLEEP 60
SLEEP 90
SLEEP OFF

The SLEEP display appears about one minute before the TV turns off.

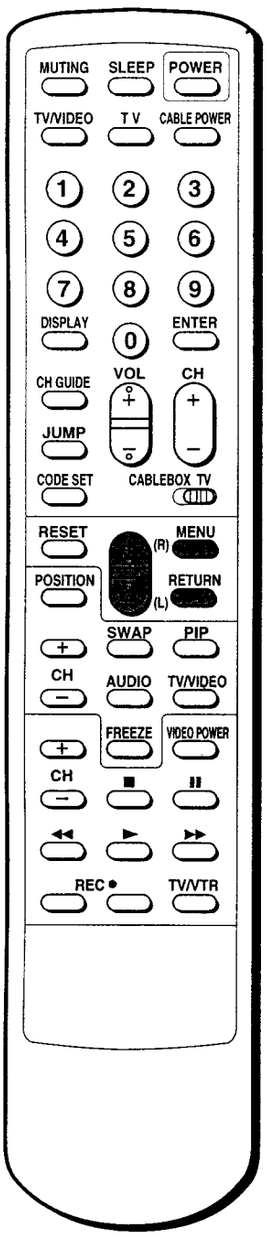
To cancel the setting
Press SLEEP until "OFF" mode appears.
The "SLEEP OFF" display appears for about three seconds.
OR
Turn the TV off.
The sleep timer setting is cancelled.

Switching Quickly Between Two Channels—JUMP

Press JUMP once to recall the channel you were watching previously. Press JUMP again to switch back. Use this feature to keep track of two programs alternately.

JUMP

Using Closed Caption



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The Closed Caption system checks for errors before captions or text appear. If an error is found, the mistake does not appear; a white box appears instead. In most cases, this allows you to read the caption without difficulty. Of course, not all errors can be found, and in some cases mistakes may appear.

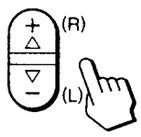
Poor reception of any TV station can cause poor reception of the Closed Caption signal causing errors or missing captions.

1 Press MENU.
The main menu appears.

MENU

```
▶VIDEO
 AUDIO
 TIME
 SET UP
 CLOSED CAPTION
Use ♦ RETURN  Exit MENU
```

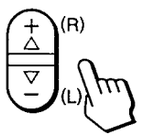
2 Press △+ or ▽– to select CLOSED CAPTION.
Then press RETURN.
The CLOSED CAPTION screen appears.



RETURN

```
CLOSED CAPTION
▶CC/TEXT OFF
 CC1
 CC2
 TEXT1
 TEXT2
 ↩MENU
Use ♦ RETURN  Exit MENU
```

3 Press △+ or ▽– to select closed caption mode.



Select CC1 or CC2 to view Captions. A Caption is a printed version of the dialogue or sound effects of a program. (The mode should be set to CC1 for most programs.)

```
CLOSED CAPTION
 CC/TEXT OFF
▶CC1
 CC2
 TEXT1
 TEXT2
 ↩MENU
Use ♦ RETURN  Exit MENU
```

Select TEXT1 or TEXT2 to view Text. Text is information that is presented using the half to full television screen. It is usually not related to the program.

```
CLOSED CAPTION
 CC/TEXT OFF
 CC1
 CC2
▶TEXT1
 TEXT2
 ↩MENU
Use ♦ RETURN  Exit MENU
```

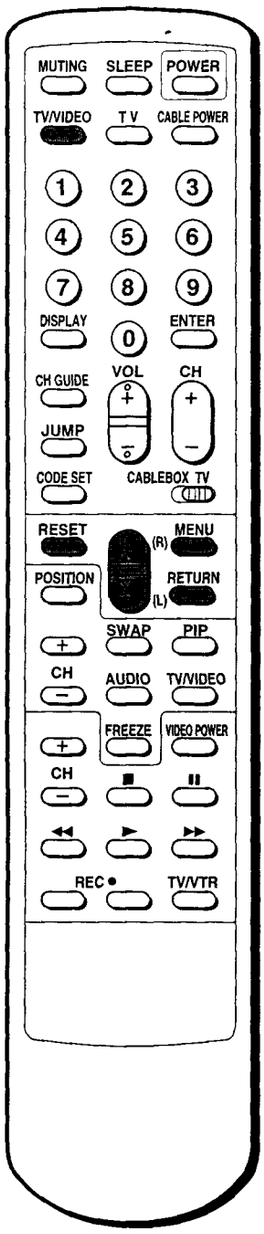
Select CC/TEXT OFF if you do not want to use the CLOSED CAPTION mode.

```
CLOSED CAPTION
▶CC/TEXT OFF
 CC1
 CC2
 TEXT1
 TEXT2
 ↩MENU
Use ♦ RETURN  Exit MENU
```

Press RETURN.
The setting is completed.

RETURN

Adjusting Picture and Sound Quality



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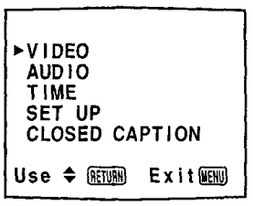
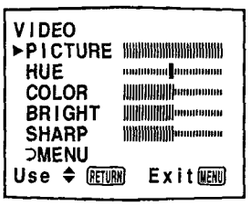
Adjusting the Picture

You can adjust the picture (and sound, pp. 34–37) for each input mode (TV,VIDEO 1, VIDEO 2, VIDEO 3) by pressing TV/VIDEO on the TV or on the Remote Commander to select the input mode before making the adjustments. These adjustments are retained in memory even when you turn off the TV until you change the adjustments again. (except for KV-27TS29/2970M)

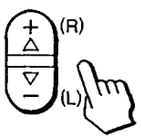
1 Press MENU.
The main menu appears, and the cursor points to "VIDEO".

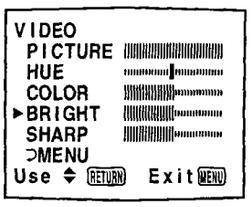


2 Press RETURN.
The VIDEO menu appears.

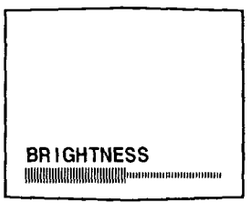


3 Press △+ or ▽– to select the item you want to adjust.
For example, to adjust the picture brightness, select BRIGHT.

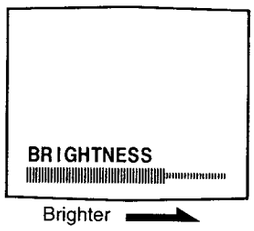




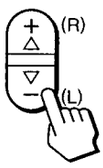
Press RETURN.
The adjustment bar appears.

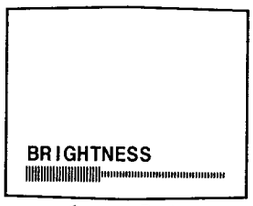


4 Press △+ or ▽– to make the adjustment.



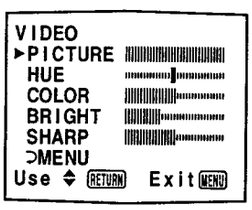
Brighter





Darker

Press RETURN.
The new setting appears in the VIDEO menu.



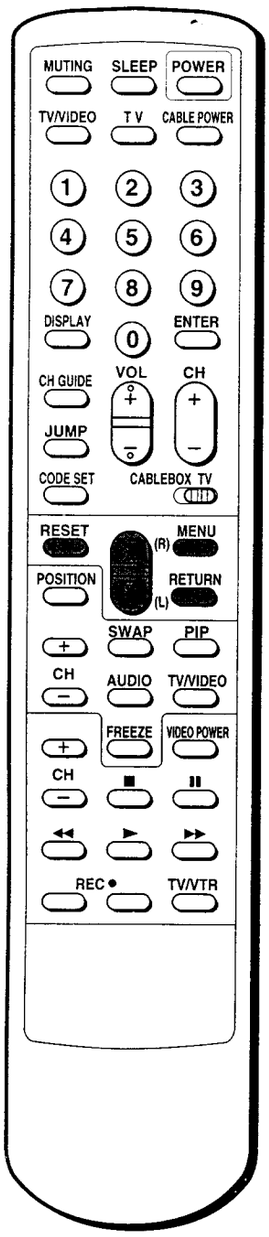
To adjust other items
Repeat steps 3–4.

PICTURE	decrease picture contrast with soft color	increase picture contrast with vivid color
HUE	make skin tones become purplish	make skin tones become greenish
COLOR	decrease color intensity	increase color intensity
BRIGHTNESS	darken the picture	brighten the picture
SHARPNESS	soften the picture	sharpen the picture

The menus and adjustment bars will disappear automatically after 90 seconds if you do not press any other buttons during that time.

To return to the normal screen
Press MENU.

To restore the factory (mid-level) setting
Go to the VIDEO menu and press RESET. All the settings except for PICTURE will be restored to the mid-level setting.



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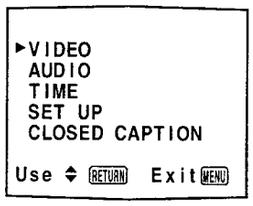
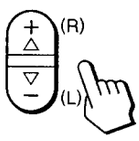
Adjusting the Sound

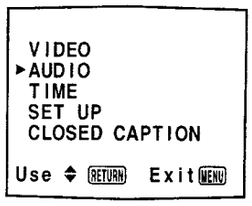
1 Press MENU.
The main menu appears.

MENU



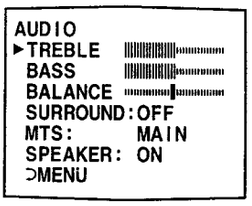
2 Press △+ or ▽– to select AUDIO.



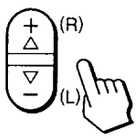


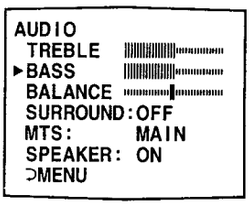
Press RETURN.
The AUDIO menu appears.

RETURN



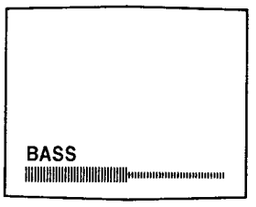
3 Press △+ or ▽– to select the sound quality (TREBLE, BASS or BALANCE) that you want to adjust. For example, to adjust the bass response, select BASS.



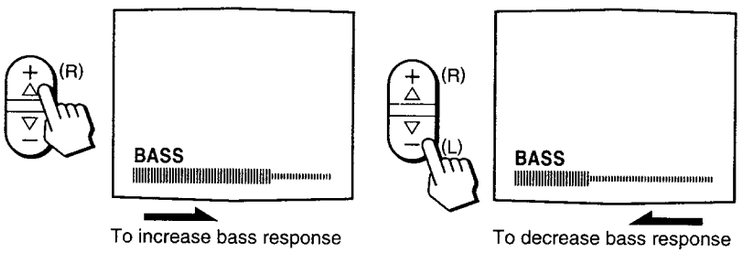


Press RETURN.
The adjustment bar appears.

RETURN



4 Press △+ or ▽– to make the adjustment.



Press RETURN.
The new setting will appear in the AUDIO menu.

To adjust other items
Repeat steps 3–4.

TREBLE	decrease the treble response	increase the treble response
BASS	decrease the bass response	increase the bass response
BALANCE	emphasize the left speaker's volume	emphasize the right speaker's volume

The menus and adjustment bars will disappear automatically after 90 seconds if you do not press any buttons during that time.

To restore the factory (mid-level) settings
Go to the AUDIO menu and press RESET. The settings for MTS and SPEAKER will not be affected (pp. 36–37).

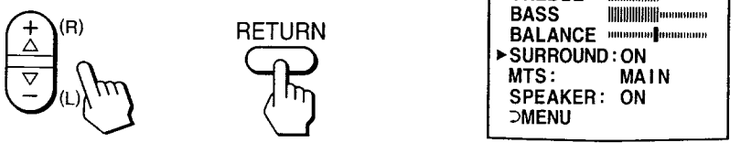
To return to the normal screen
Press MENU.

Listening to surround sound—SURROUND

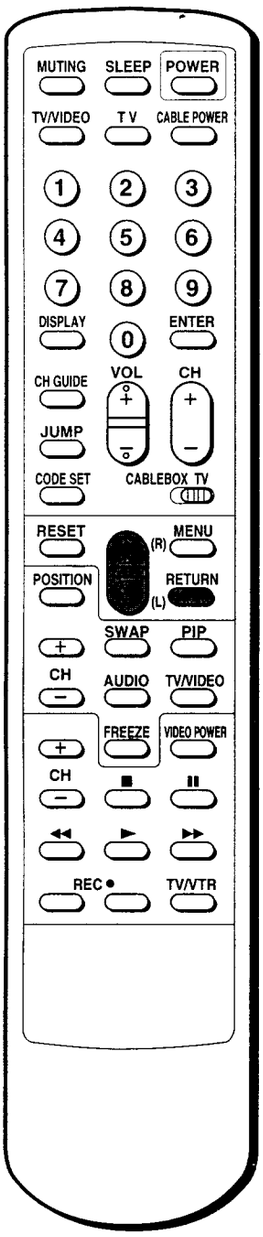
1-2 (Follow steps 1–2 in "Adjusting the Sound", p. 34.)

3 Press △+ or ▽– to select SURROUND.
Then press RETURN.

4 Press △+ or ▽– to select ON or OFF modes alternately.
Then press RETURN.



SURROUND gives sound reproduction with the atmosphere of a movie theater or a concert hall.



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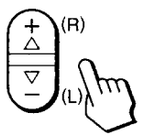
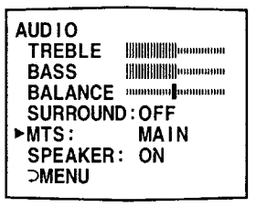
Receiving Multichannel TV Sound programs—MTS

1-2 (Follow steps 1–2 in "Adjusting the Sound," p. 34.)

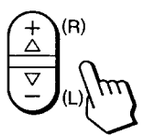
3 Press △+ or ▽– to select MTS.
Then press RETURN.

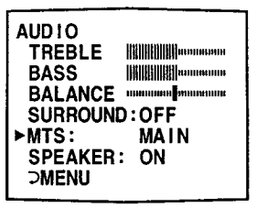




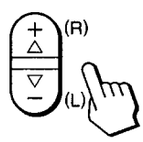
4 Press △+ or ▽– to select MAIN, SAP or MONO modes alternately.

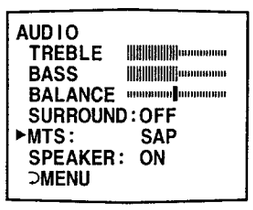
Select the MAIN mode to listen to STEREO sound.
The STEREO indicator on the TV will light up whenever a stereo broadcast is received.





Select the SAP mode to listen to Second Audio Programs.

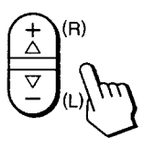


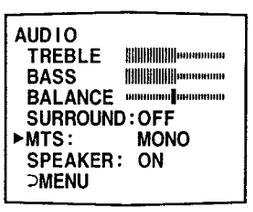


Note

During SAP mode, the sound of non-SAP programs will be muted.

Select the MONO mode to eliminate excessive noise during stereo broadcasts, caused by a weak signal.





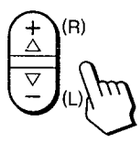
5 Press RETURN.
The mode is selected.

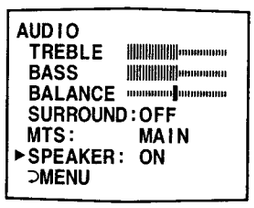
Turning the speaker on or off

Use this feature to turn the TV speaker off when you connect an audio system (p. 26–27).

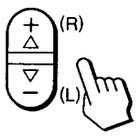
1-2 (Follow steps 1–2 in "Adjusting the Sound," p. 34.)

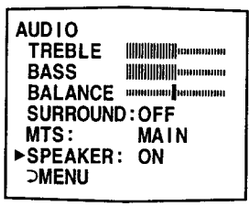
3 Press △+ or ▽– to select SPEAKER.
Then press RETURN.





4 Press △+ or ▽– to select ON or OFF modes alternately.



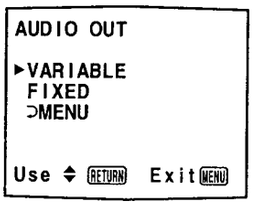


If you select ON mode:

The setting is completed.

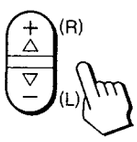
If you select OFF mode:

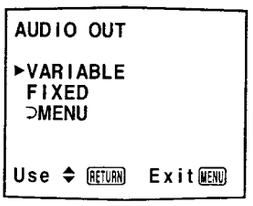
1 Press RETURN.
The AUDIO OUT menu appears.



2 Press △+ or ▽– to select VARIABLE or FIXED.

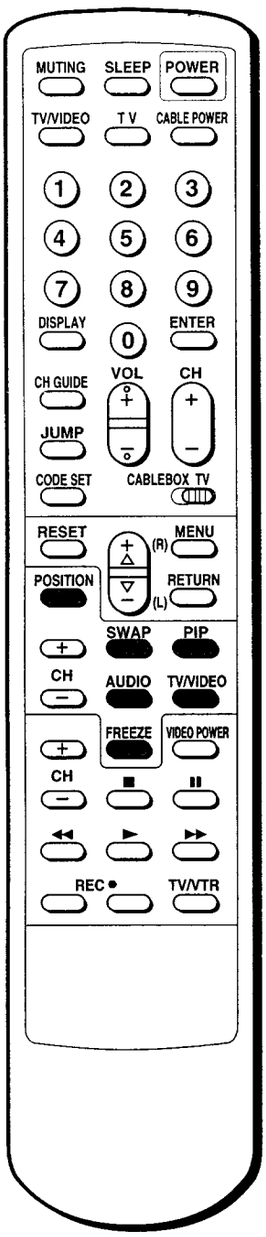
VARIABLE: Sound output varies according to the TV volume.
FIXED : Sound output is always invariable.





To return to the normal screen
Press MENU.

Watching Two Pictures at Once (Picture-in-Picture)



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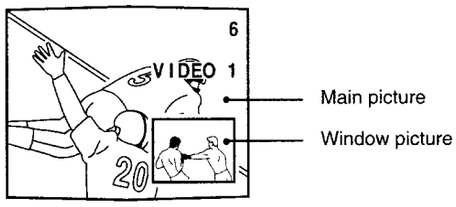
Note

To operate your VCR with the supplied Remote Commander, See "Using the Pre-Programmed Remote Commander", pp. 55–57.

You can watch both the main picture and a window picture simultaneously by using the Picture-in-Picture (PIP) function.
Model KV-32TS46 is equipped with two-tuner PIP, allowing you to watch two TV channels at once.
Other models are equipped with one-tuner PIP. To watch two different TV channels, you must first connect a VCR to the TV, to watch a second TV channel through the VCR tuner. (See"Connecting Other Equipment", pp. 22–27.)

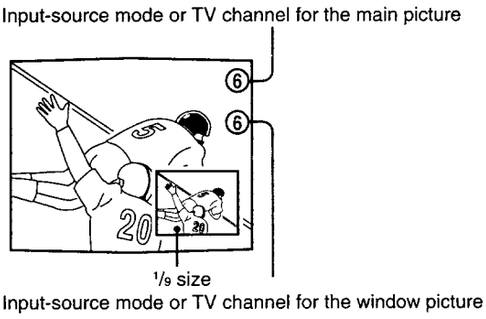


Picture-in-Picture special features
When watching the main picture and a window picture, you can:

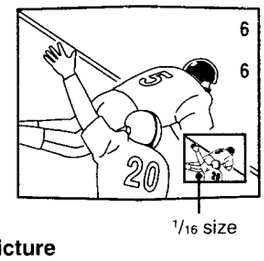
- Swap the main and window pictures (SWAP).
- Change the position of the window picture (POSITION).
- Display a still picture as a window (FREEZE).
- Choose the sound from the main or window picture (AUDIO).

Displaying a window picture—PIP

Press PIP to display a window picture



Press PIP again to display a smaller window picture

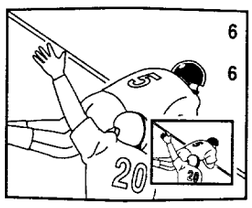


To disappear the window picture
Press PIP once more.

Changing the window picture input mode

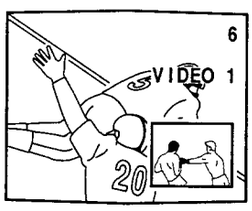
1 Press PIP to display a window picture.

PIP



2 Press TV/VIDEO in the Picture-in-Picture control area to select the input mode.
Each time you press TV/VIDEO, "TV", "VIDEO 1", "VIDEO 2" and "VIDEO 3" appear in sequence.

TV/VIDEO



A window picture will appear in the same input mode as the last time you used PIP.

To receive the window picture sound

Press AUDIO.
The ♪ display appears for a few seconds, indicating that the window picture sound is being received.

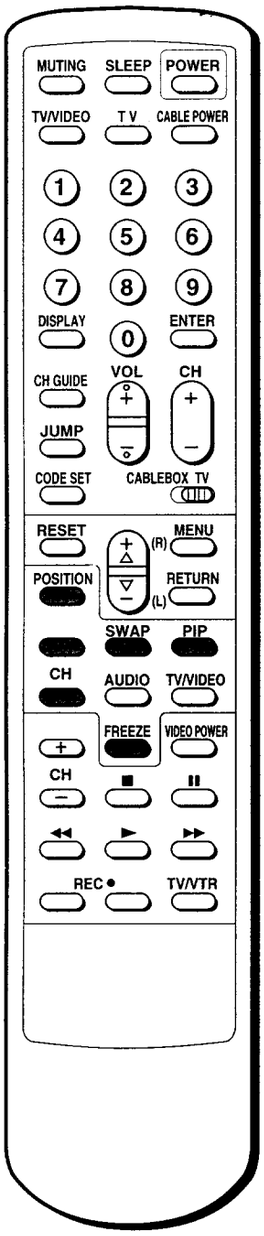
AUDIO

To restore the main picture sound

Press AUDIO again.

Notes

- If the main picture is not receiving an image, the window picture may be in black and white.
- When you turn PIP on or when you turn the TV on with PIP mode, the window picture will appear at the bottom right of the screen.
- The window picture may be affected by the condition of the main picture.
- The window picture sound is also output from the VARIABLE/FIX AUDIO OUT jacks.



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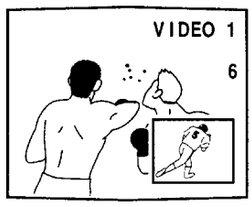
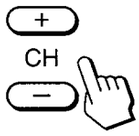
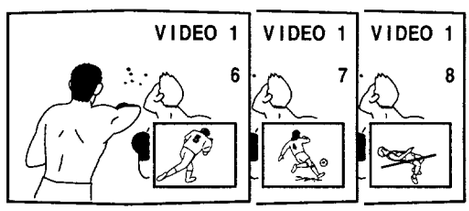
Changing TV channels in the window picture

1 Press PIP to display a window picture.



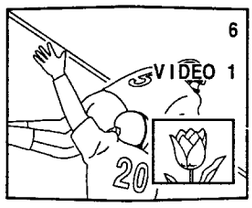
2 Press CH +/– in the PIP control area.





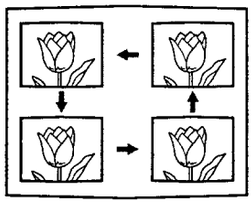
Changing the position of the window picture—POSITION

1 Press PIP to display a window picture.



2 Press POSITION.

Each time you press POSITION, the window picture will move counterclockwise on the screen, as illustrated below.

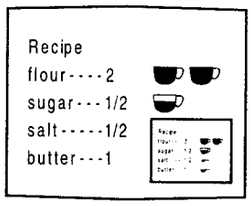


Displaying a still picture — FREEZE

Use the FREEZE function to display a still picture as a window.
This function is useful when you want to write down a recipe from a cooking program, a displayed address or a phone number and so on.

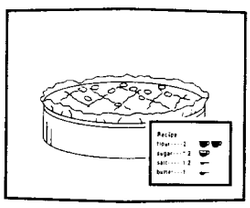
1 Press PIP to display a window picture.

PIP



2 Press FREEZE.
The window picture image remains still on the screen.

FREEZE

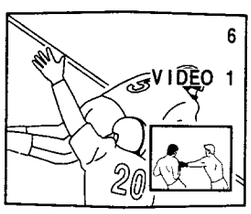


To restore the normal picture
Press FREEZE again.

Swapping the main and window pictures — SWAP

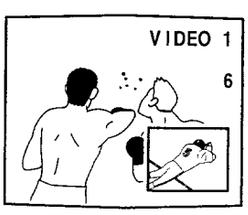
1 Press PIP to display a window picture.

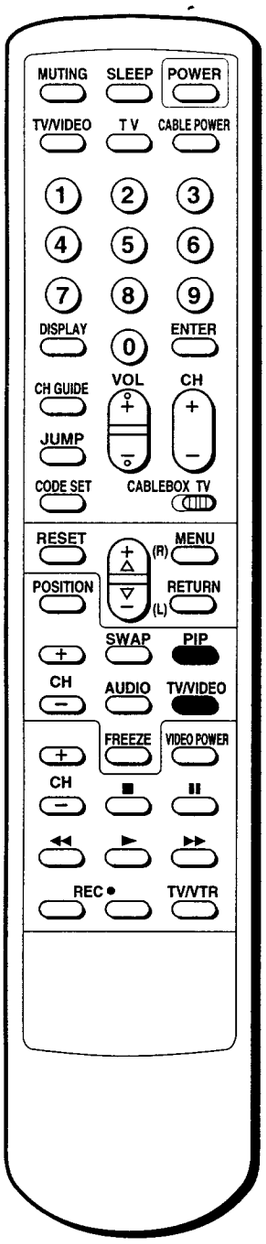
PIP



2 Press SWAP.
Each time you press SWAP, the images from the main and window pictures switch places.

SWAP





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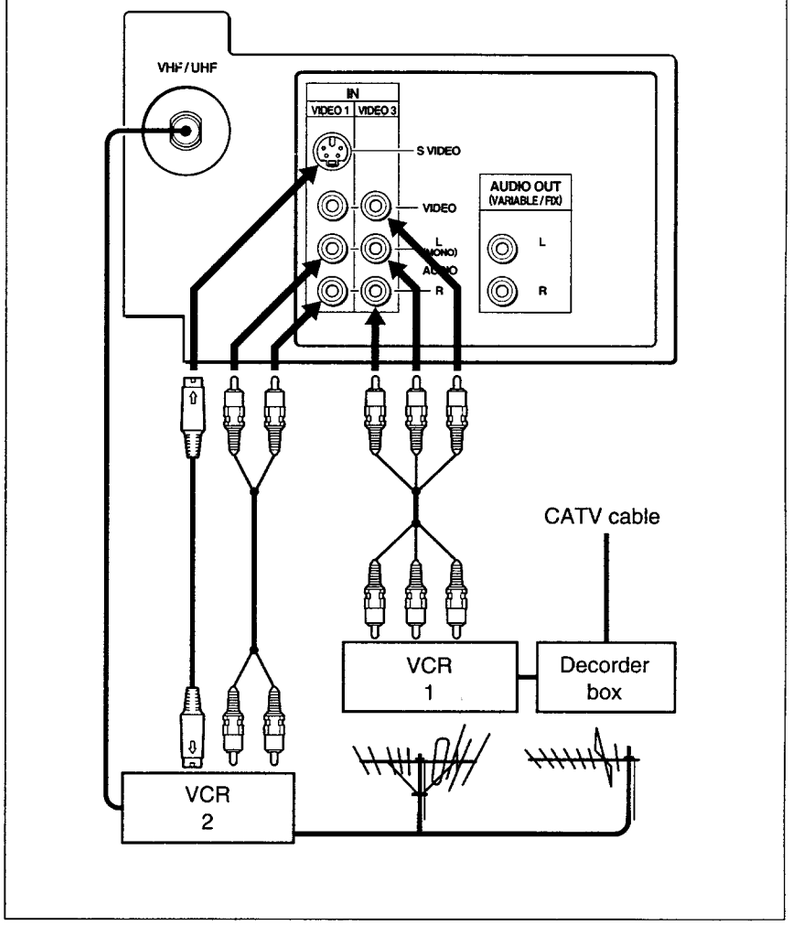
Displaying a pay cable TV channel as a window picture

To display a pay cable TV channel as a window picture, connect your decorder box as illustrated below.

Connection



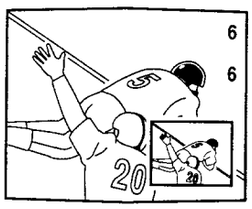
Note

The channels being received through the AUX terminal cannot be displayed as a window picture. (KV-32TS46 only)

After making the connections, turn the cable mode on by following the steps "Turning the Cable Mode On or Off", p. 17. Then continue with steps below.

1 Press PIP to display a window picture.

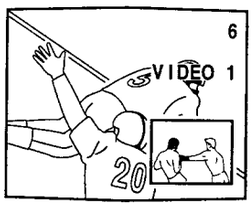
PIP



2 Press TV/VIDEO in the Picture-in-Picture control area to select the input mode.

Each time you press TV/VIDEO, "TV", "VIDEO 1", "VIDEO 2" and "VIDEO 3" appear in sequence.

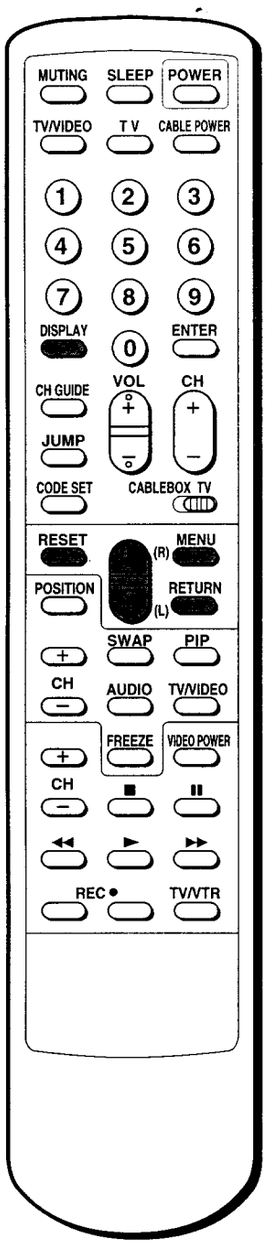
TV/VIDEO



3 Put your VCR on an inactive channel (CH 3 or 4).

4 Change pay cable TV channels with the decoder box.

Using the Timer-Activated Functions



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Setting the Clock—CURRENT TIME SET

Follow these instructions to set the current time. The correct time must be set in order to use the timer-activated functions (ON/OFF TIMER, CHANNEL BLOCK).

EXAMPLE: Set the time to 3:15 PM, Monday.

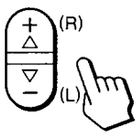
1 Press MENU.
The main menu appears.

MENU

```
▸VIDEO
 AUDIO
 TIME
 SET UP
 CLOSED CAPTION

Use ♦ RETURN  Exit MENU
```

2 Press △+ or ▽– to select TIME.




```
 VIDEO
 AUDIO
▸TIME
 SET UP
 CLOSED CAPTION

Use ♦ RETURN  Exit MENU
```

Press RETURN.
The TIME menu appears, and the cursor points to "CURRENT TIME SET".

RETURN

```
TIME
▸CURRENT TIME SET
 ON/OFF TIMER
 CHANNEL BLOCK
 ⊃MENU

 ___ --:-- AM
Use ♦ RETURN  Exit MENU
```

3 Press RETURN.
The CURRENT TIME SET screen appears.

RETURN

```
CURRENT TIME SET

▸___ --:-- AM
 ⊃MENU


Use ♦ RETURN  Exit MENU
```

4 Press RETURN again.
"Set the day." appears on the screen.

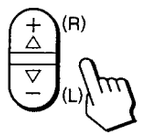
RETURN

```
CURRENT TIME SET

  SUN 12:00 AM
 ⊃MENU


Set the day.
Use ♦ RETURN  Exit MENU
```

5 Press △+ or ▽– to set the day.
Each time you press △+ or ▽–, the day changes consecutively.



Press RETURN.
"Set the time." appears on the screen.

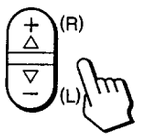
RETURN

```
CURRENT TIME SET

  MON 12:00 AM
  ⊃MENU

Set the time.
Use ◆ RETURN  Exit MENU
```

6 Press △+ or ▽– to set the hour.
Each time you press △+ or ▽–, the hour changes starting with "12:00 AM."



Press RETURN.

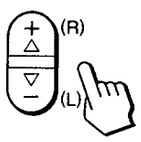
RETURN

```
CURRENT TIME SET

  MON  3:00 PM
  ⊃MENU

Set the time.
Use ◆ RETURN  Exit MENU
```

7 Press △+ or ▽– to set the minutes.
Each time you press △+ or ▽–, the minutes change in sequence.




```
CURRENT TIME SET

  MON  3:15 PM
  ⊃MENU

Set the time.
Use ◆ RETURN  Exit MENU
```

Press RETURN.
The setting is completed, and the clock starts.

RETURN

```
CURRENT TIME SET

▶ MON  3:15 PM
  ⊃MENU

Use ◆ RETURN  Exit MENU
```

To reset the time
Press RESET while in the CURRENT TIME screen, and repeat steps 4–7.

To display the time
Press DISPLAY.

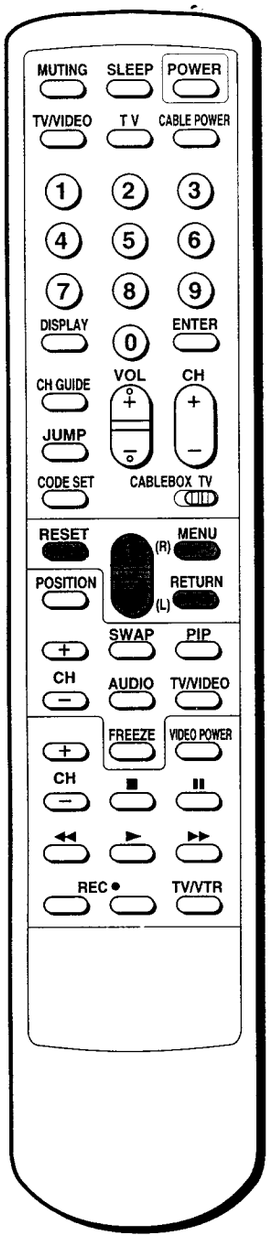
To return to the normal screen
Press MENU.

Notes

- The internal clock of this TV operates on a 12-hour cycle. If a 24-hour cycle number (for instance, 13:00) is entered, it will be cleared when you press RETURN.

12:00 AM stands for midnight. 12:00 PM stands for noon.

- All the settings including CURRENT TIME SET will be erased if you unplug the TV or a power failure occurs. Reset the current time by following steps 1–7.



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Setting the ON/OFF TIMER

With this function you can set your favorite program to appear on the screen at the time that you set.

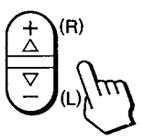
EXAMPLE: Set the timer to turn on the TV every Monday through Friday at 3:15 PM for 2 hours, on channel 21.

1 Press MENU.
The main menu appears.

MENU

```
▸VIDEO
 AUDIO
 TIME
 SET UP
 CLOSED CAPTION
Use ◆ RETURN Exit MENU
```

2 Press △+ or ▽– to select TIME.
Then press RETURN.
The TIME menu appears.

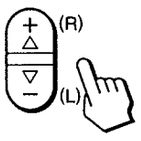


RETURN

```
TIME
▸CURRENT TIME SET
 ON/OFF TIMER
 CHANNEL BLOCK
 ↩MENU

 MON  3:15 PM
Use ◆ RETURN Exit MENU
```

3 Press △+ or ▽– to select ON/OFF TIMER.
Then press RETURN.
The ON/OFF TIMER screen appears.



RETURN

```
ON/OFF TIMER

 ▸EVERY SUN-SAT
  12:00AM –h CH---
 ↩MENU

Use ◆ RETURN Exit MENU
```

Note

If the ON/OFF TIMER display appears in black, the current time has not been set and you cannot select ON/OFF TIMER. To set the clock, see "Setting the Clock—CURRENT TIME SET", pp. 44–45.

4 Press RETURN again.
"Set the day." appears on the screen.

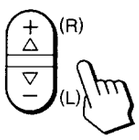
RETURN

```
ON/OFF TIMER

  EVERY SUN-SAT
  12:00AM –h CH---
 ↩MENU

Set the day.
Use ◆ RETURN Exit MENU
```

5 Press △+ or ▽– to set the day.
Each time you press △+ or ▽–, the days of the week change as shown in Fig. 1.
Then press RETURN.
"Set the time." appears on the screen.

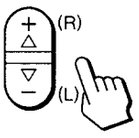


```
ON/OFF TIMER

  EVERY MON-FRY
  12:00AM -h CH---
 ⊃MENU

Set the time.
Use ◆ RETURN  Exit MENU
```

6 Press △+ or ▽– to set the hour that you want the TIMER to start.
Each time you press △+ or ▽–, the hour changes in sequence.
Then press RETURN.

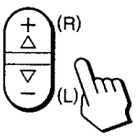


```
ON/OFF TIMER

  EVERY MON-FRY
   3:00PM -h CH---
 ⊃MENU

Set the time.
Use ◆ RETURN  Exit MENU
```

7 Press △+ or ▽– to set the minutes.
Each time you press △+ or ▽–, the minutes change in sequence.
Then press RETURN.
"Set the duration." appears on the screen.

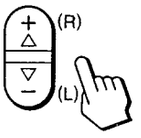


```
ON/OFF TIMER

  EVERY MON-FRY
   3:15PM -h CH---
 ⊃MENU

Set the duration.
Use ◆ RETURN  Exit MENU
```

8 Press △+ or ▽– to set the duration of time.
Each time you press △+ or ▽–, the duration changes from "1" to "6" in sequence.
Then press RETURN.
"Select the channel" appears on the screen.

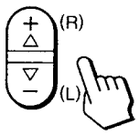


```
ON/OFF TIMER

  EVERY MON-FRY
   3:15PM 2h CH---
 ⊃MENU

Select the channel
Use ◆ RETURN  Exit MENU
```

9 Press △+ or ▽– to set the channel that you want the TV to tune in.
Each time you press △+ or ▽–, the channel number changes from 1 to 125 in sequence.




```
ON/OFF TIMER

  EVERY MON-FRY
   3:15PM 2h CH 21
 ⊃MENU

Select the channel
Use ◆ RETURN  Exit MENU
```

Press RETURN.
The setting is completed, and the TIMER indicator on the front of the TV lights up.

```
ON/OFF TIMER

 ►EVERY MON-FRY
   3:15PM 2h CH 21
 ⊃MENU


Use ◆ RETURN  Exit MENU
```

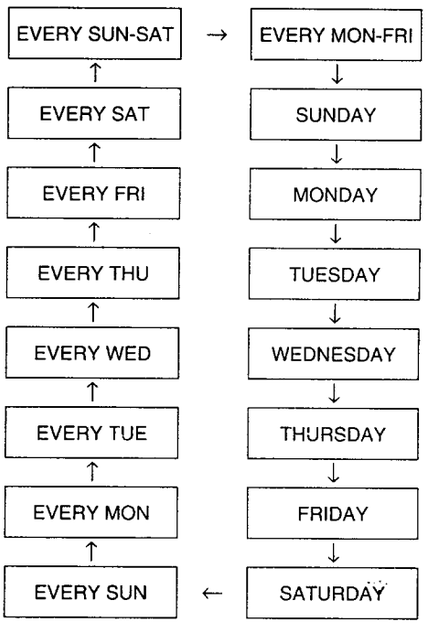
To clear the ON/OFF TIMER setting
Press RESET while in the ON/OFF TIMER screen.

To return to the normal screen
Press MENU.

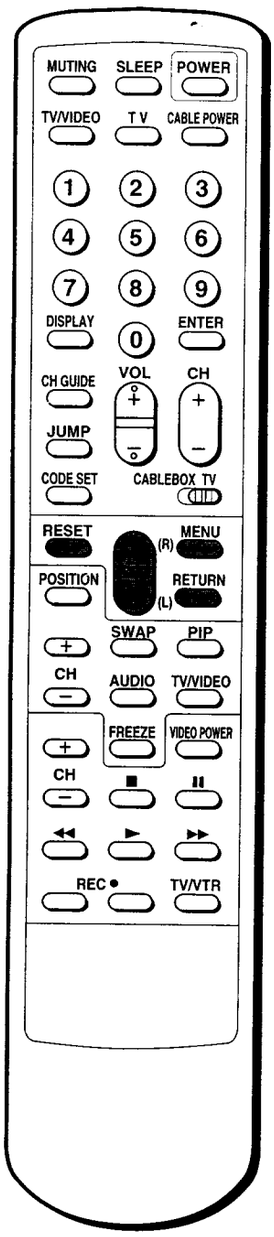
Notes

- While the TIMER is set, the TIMER indicator on the TV is on.
- One minute before the timer goes off, the "TV will turn off" display will appear on the screen.
- All the settings including ON/OFF TIMER will be erased if you unplug the TV or a power failure occurs. Reset the ON/OFF TIMER by following steps 1-9.
- If you have not set the clock correctly, the ON/OFF TIMER will not operate at the proper time. To set the clock, see "Setting the Clock–CURRENT TIME SET", pp. 44–45.

Fig. 1
Selecting the day(s) of the week
When you press △+, the days of the week appear in the following order.



(▽–: reverse order)



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Setting CHANNEL BLOCK

Use this function to block a channel from appearing on the screen during the time you specify. You can use this function to prevent children from watching undesirable programs.

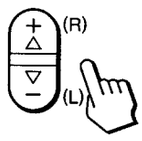
EXAMPLE: Set CHANNEL BLOCK every Sunday at 8:45 PM for one hour, on channel 38.

1 Press MENU.
The main menu appears.

MENU

```
▸VIDEO
 AUDIO
 TIME
 SET UP
 CLOSED CAPTION

Use ◆ RETURN  Exit MENU
```

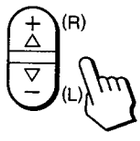
2 Press △+ or ▽– to select TIME.
Then press RETURN.
The TIME menu appears.



RETURN

```
TIME
▸CURRENT TIME SET
 ON/OFF TIMER
 CHANNEL BLOCK
 ↘MENU

 MON  3:15 PM
Use ◆ RETURN  Exit MENU
```

3 Press △+ or ▽– to select CHANNEL BLOCK.
Then press RETURN.
The CHANNEL BLOCK screen appears.



RETURN

```
CHANNEL BLOCK

 ▸EVERY SUN-SAT
  12:00AM –h CH---
  ↘MENU

Use ◆ RETURN  Exit MENU
```

Note

If the CHANNEL BLOCK display appears in black, the current time has not been set and you cannot select CHANNEL BLOCK. To set the clock, see "Setting the Clock—CURRENT TIME SET", pp. 44–45.

4 Press RETURN again.
"Set the day." appears on the screen.

RETURN

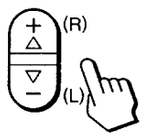
```
CHANNEL BLOCK

  EVERY SUN-SAT
  12:00AM –h CH---
  ↘MENU

Set the day.
Use ◆ RETURN  Exit MENU
```

5 Press △+ or ▽– to set the day.

Each time you press △+ or ▽–, the days of the week change as shown in Fig. 1.(See p. 47.)

Then press RETURN.

"Set the time." appears on the screen.

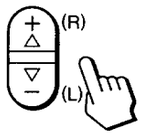


```
CHANNEL BLOCK

  SUNDAY
  12:00AM -h CH---
 ⊃MENU

Set the time.
Use ◆ RETURN  Exit MENU
```

6 Press △+ or ▽– to set the hour.

Each time you press △+ or ▽–, the hour changes in sequence.

Then press RETURN.



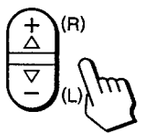
```
CHANNEL BLOCK

  SUNDAY
   8:00PM -h CH---
 ⊃MENU

Set the time.
Use ◆ RETURN  Exit MENU
```

7 Press △+ or ▽– to set the minutes.

Each time you press △+ or ▽–, the minutes change in sequence.

Then press RETURN.

"Set the duration." appears on the screen.



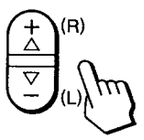
```
CHANNEL BLOCK

  SUNDAY
   8:45PM -h CH---
 ⊃MENU

Set the duration.
Use ◆ RETURN  Exit MENU
```

8 Press △+ or ▽– to set the duration of time that you want the TV remain blocked.

Each time you press △+ or ▽–, the duration changes from 1 to 6 in sequence.

Then press RETURN.

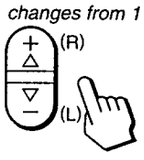
"Select the channel" appears on the screen.



```
CHANNEL BLOCK

  SUNDAY
   8:45PM 1h CH---
 ⊃MENU

Select the channel
Use ◆ RETURN  Exit MENU
```

9 Press △+ or ▽– to set the channel that you want to block.

Each time you press △+ or ▽–, the channel number changes from 1 to 125 in sequence.




```
CHANNEL BLOCK

  SUNDAY
   8:45PM 1h CH 38
 ⊃MENU

Select the channel
Use ◆ RETURN  Exit MENU
```

Press RETURN.

The setting is completed.

```
CHANNEL BLOCK

 ▶SUNDAY
   8:45PM 1h CH 38
 ⊃MENU


Use ◆ RETURN  Exit MENU
```

If you select a channel which has been blocked, the message of "BLOCKED" appears.

```
BLOCKED
```

To clear the BLOCK setting

Press RESET while in the CHANNEL BLOCK screen.

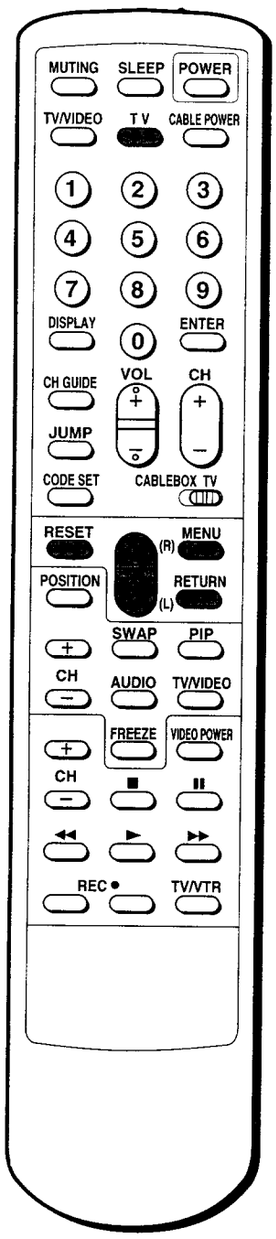
To return to the normal screen

Press MENU.

Notes

- If you set a new CHANNEL BLOCK by following steps 1-9, the original setting will be erased.
- If you have not set the clock correctly. CHANNEL BLOCK will not operate at the proper time. To set the clock, see "Setting the Clock—CURRENT TIME SET", pp. 44–45.

Customizing the Screen Display



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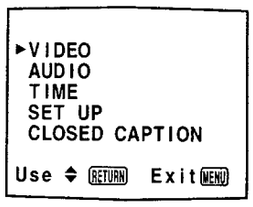
Setting Channel Captions — CH CAPTION

Use this feature to caption up to 12 channel number displays with the matching channel call letters.

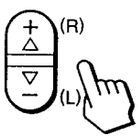
EXAMPLE: Caption channel 20 with ESPN at the caption position number 4.

1 Press MENU.
The main menu appears.

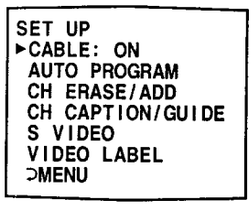
MENU



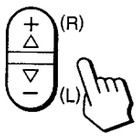
2 Press △+ or ▽– to select SET UP.
Then press RETURN.
The SET UP menu appears.



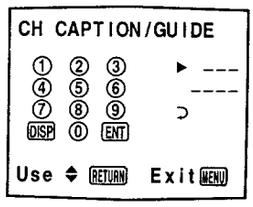
RETURN



3 Press △+ or ▽– to select CH CAPTION/GUIDE.
Then press RETURN.
The CH CAPTION/GUIDE screen appears.



RETURN

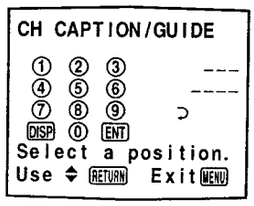


Note

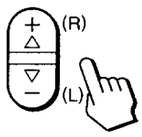
If the CH CAPTION display appears in black, the TV is in video mode and you cannot select CH CAPTION/GUIDE. Press TV or TV/VIDEO to change to TV mode.

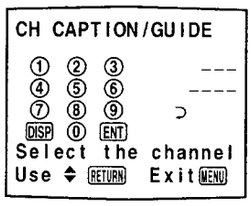
4 Press RETURN again.
"Select a position." appears on the screen.

RETURN

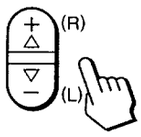


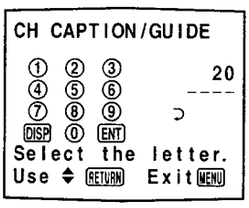
5 Press △+ or ▽– to select a caption position number.
Each time you press △+ or ▽–, the caption position number is marked in sequence.
Then press RETURN.
"Select the channel" appears on the screen.





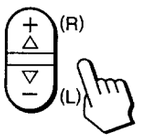
6 Press △+ or ▽– to select the channel you want to caption.
Each time you press △+ or ▽–, the channel number changes from 1 to 125 in sequence.
Then press RETURN.
"Select the letter." appears on the screen.

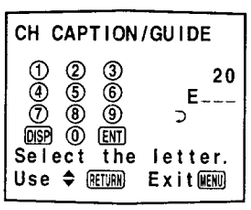




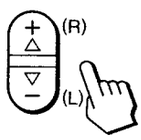
7 Press △+ or ▽– to select the first letter.
Each time you press △+ or ▽–, "0-9", "A-Z", "&", "!", "–" and "_(blank space)" appear in sequence.

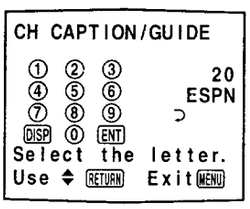
Then press RETURN.



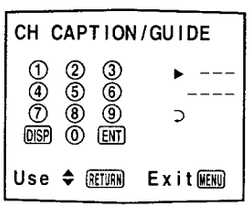


8 Repeat step 7 to select each remaining letter.
(For a 3-letter caption, leave a space by pressing RETURN only.)





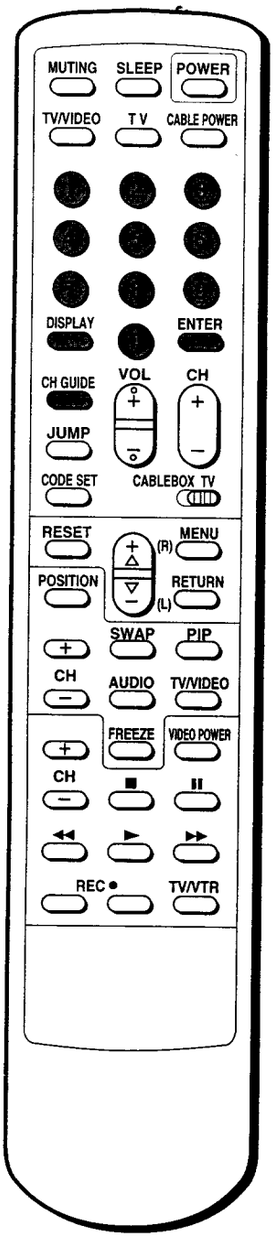
9 Press RETURN.
The setting is completed.



To caption other channels
Repeat steps 4-9.

To erase unneeded captions
Call the caption setting screen by following steps 1–5, and press RESET.

To return to the normal screen
Press MENU.



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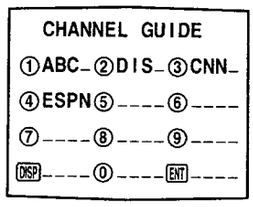
Viewing the Captioned Channels — CH GUIDE

Use this feature to display the captions you set, and to select a channel directory for viewing.

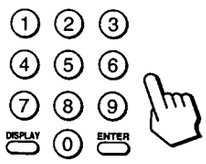
1 Press CH GUIDE.

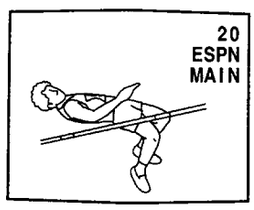
A directory appears, corresponding to the directory keys on the Remote Commander.

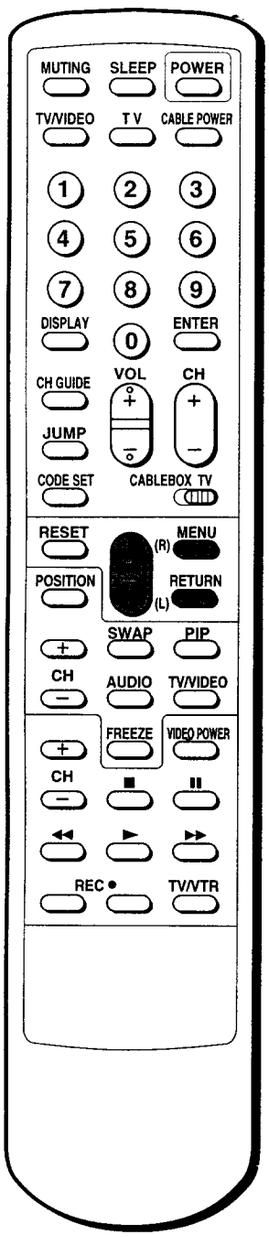


To cancel the CHANNEL GUIDE screen
Press CH GUIDE again.

2 Press the directory key of the channel you want to watch.







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Setting VIDEO LABEL (except for KV-27TS29/2970M)

Use this feature to label each input mode in order to identify the equipment connected to each input terminal.

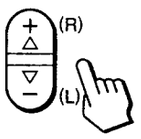
EXAMPLE: Label VIDEO 1 IN as VHS.

1 Press MENU.
The main menu appears.

MENU

```
▶VIDEO
 AUDIO
 TIME
 SET UP
 CLOSED CAPTION

Use ⇕ RETURN  Exit MENU
```

2 Press △+ or ▽– to select SET UP.



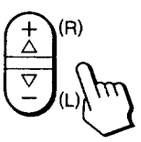

```
 VIDEO
 AUDIO
 TIME
▶SET UP
 CLOSED CAPTION

Use ⇕ RETURN  Exit MENU
```

Press RETURN.
The SET UP menu appears.

RETURN

```
SET UP
▶CABLE: ON
 AUTO PROGRAM
 CH ERASE/ADD
 CH CAPTION/GUIDE
 S VIDEO: ON
 VIDEO LABEL
 ↻MENU
```

3 Press △+ or ▽– to select VIDEO LABEL.

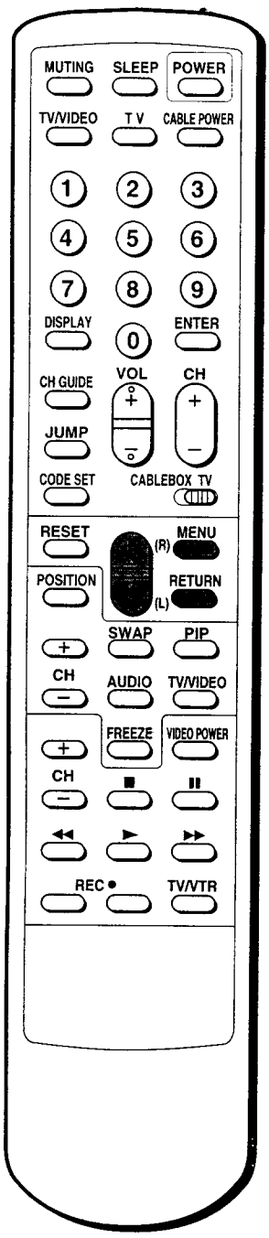



```
SET UP
 CABLE: ON
 AUTO PROGRAM
 CH ERASE/ADD
 CH CAPTION/GUIDE
 S VIDEO: ON
▶VIDEO LABEL
 ↻MENU
```

Press RETURN.
The VIDEO LABEL screen appears.

RETURN

```
VIDEO LABEL

▶VIDEO1: VIDEO1
 VIDEO2: VIDEO2
 VIDEO3: VIDEO3
 ↻MENU

Use ⇕ RETURN  Exit MENU
```



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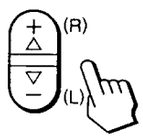
To return to the normal screen
Press MENU.

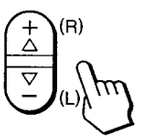
4 Press △+ or ▽– to select the input mode you want to label.




```
VIDEO LABEL
▸VIDEO1: VIDEO1
 VIDEO2: VIDEO2
 VIDEO3: VIDEO3
 ↵MENU
Use ↕ RETURN Exit MENU
```

Press RETURN.

5 Press △+ or ▽– to select VHS.




```
VIDEO LABEL
▸VIDEO1: VIDEO1
 VIDEO2: VIDEO2
 VIDEO3: VIDEO3
 ↵MENU
Use ↕ RETURN Exit MENU
```

Each time you press △+, the label changes:

VIDEO 1
VIDEO 1 → S VIDEO → BETA → 8 mm → VHS → LD

VIDEO 2
VIDEO 2 → BETA → 8 mm → VHS → LD

VIDEO 3
VIDEO 3 → BETA → 8 mm → VHS → LD

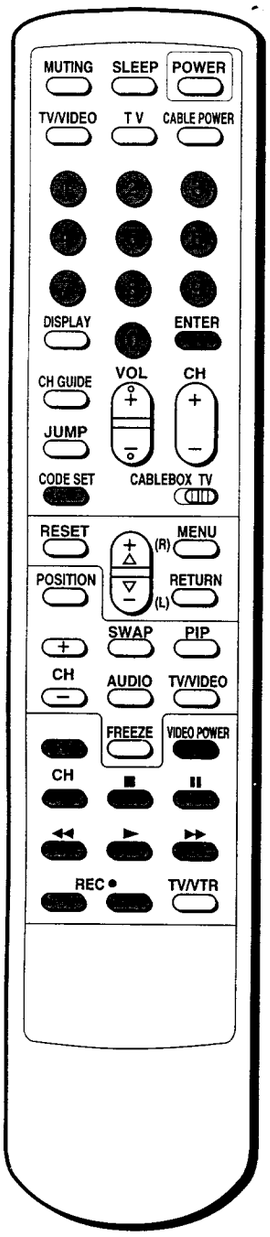
(▽–: reverse order)

Press RETURN.

```
VIDEO LABEL
▸VIDEO1: VHS
 VIDEO2: VIDEO2
 VIDEO3: VIDEO3
 ↵MENU
Use ↕ RETURN Exit MENU
```

To label other input modes
Repeat steps 4–5.

Using the Pre-Programmed Remote Commander (except for KV-27TS29/2970M)



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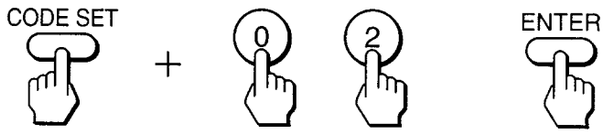
You can operate your video equipment and cable converter box that has an infrared remote detector with this supplied pre-programmed Remote Commander.

Operating Sony or Non-Sony Video Equipment - Pre-Programmed Function

With the supplied Remote Commander, you can operate a Sony video cassette recorder (Beta, 8 mm, VHS) or a multi disc player as well as most non-Sony video equipment connected to your TV by following the steps below.

1 While pressing CODE SET, press 0 - 9 to enter the manufacturer's code number (see chart on p. 56). For example, to operate a Sony 8 mm VCR, press 0, 2 and ENTER.



2 Use the video operating buttons on the Remote Commander to operate the video equipment.

Operating a VCR

To turn on or off	Press VIDEO POWER.
To change channels (when watching TV programs through the VCR's tuner)	Press CH +/-.
To record	Press ● (2 buttons simultaneously).
To play	Press ▶.
To stop	Press ■.
To fast forward	Press ▶▶.
To rewind the tape	Press ◀◀.
To pause	Press II.
To search the picture forward and backward	Press ▶▶ or ◀◀ during playback.

Operating a Video Disc Player

To play	Press ▶.
To stop	Press ■.
To pause	Press II. *To resume normal playback, press again.* *This function is effective only for CAV (standard-play disc). With CLV (extended-play disc), the TV will go into the standby mode if II is pressed.
To search the picture forward and backward	Keep pressing ▶▶ or ◀◀ during playback. *To resume normal playback, release the button.*

Manufactures and Code Numbers (VCR/video disc player)

SONY	01, 02, 03, 04
CANON	05
EMERSON	22, 30, 33
FISHER	10, 11, 12, 15
FUNAI	29
GENERAL ELECTRIC	05, 08
GOLDSTAR	25
HITACHI	07, 08
JVC	16
MAGNAVOX	05, 06, 09
MITSUBISHI	18, 19, 26, 27
MULTITECH	29
NEC	16, 23, 31
PANASONIC	05, 06
PHILCO	05, 06
PHILIPS	05, 06, 09
QUASAR	05, 06
RCA	07, 08
SAMSUNG	24, 32
SANYO	11, 15
SCOTT	21
SHARP	13, 14
SHINTOM	34
SYLVANIA	05, 06, 09
SYMPHONIC	29
TEKNIKA	28, 29
TOSHIBA	20, 21
TOTE VISION	25
ZENITH	17

The code numbers for Sony equipment are assigned as follows:

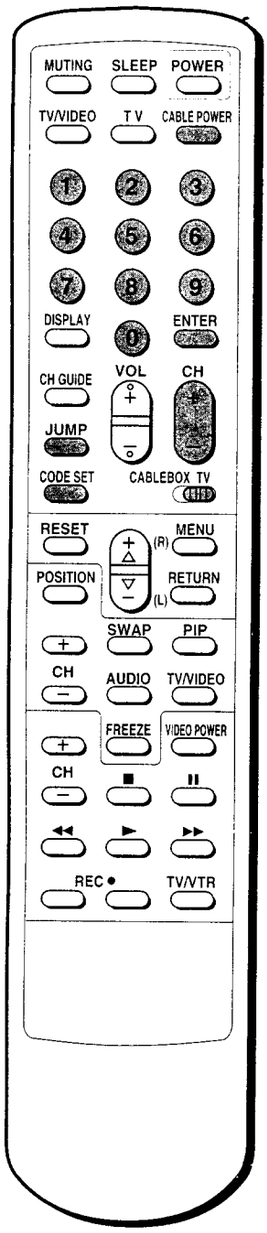
01 ..... Beta, ED Beta VCR
02 ..... 8 mm VCR
03 ..... VHS VCR
04 ..... Video disc player

Notes

- If more than one code number is listed for manufacturers other than Sony, try entering them one by one, until you come to the correct code for your equipment.
- If the video equipment does not have a certain function, the corresponding button on this Remote Commander will not operate.
- In some rare cases, you may not be able to operate your non-Sony video equipment with the supplied Remote Commander. This is because your equipment may use a code that is not provided with this Remote Commander. In this case, please use the equipment's own remote control unit.

CAUTION

When you remove the batteries from the Remote Commander, all the settings will revert to the Sony Beta setting. Reset the codes by following the steps on p. 55.



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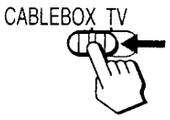
Operating a Cable Converter Box

Follow these instructions to set the manufacturer's code which will enable you to operate a connected cable converter box with the pre-programmed Remote Commander.

EXAMPLE: Operate a connected Zenith cable converter box.

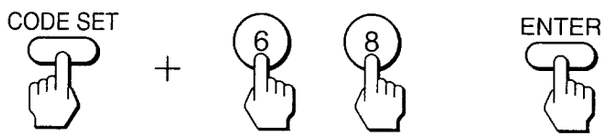
1 Set the CABLEBOX-TV selector to CABLEBOX.



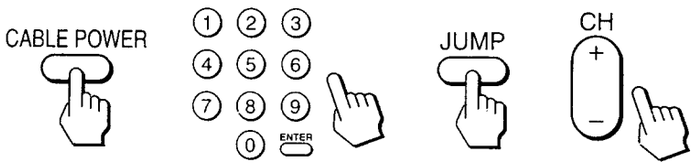
Notes

- If more than one code number is listed, try entering them one by one until you come to the correct code for your equipment.
- If you enter a new code number, the code number you previously entered at that setting is erased.
- In some rare cases, your equipment may use a code that is not provided with this Remote Commander and you may not be able to operate your cable converter box with the supplied Remote Commander. In this case, use the equipment's own remote control unit.

2 While pressing CODE SET, press 6 and 8 (Zenith's code number -see chart below) and ENTER.



3 Use CABLE POWER and the TV control buttons (0 - 9, ENTER, JUMP and CH +/-) to operate the cable converter box.



To operate the TV

Set the CABLEBOX-TV selector to TV, then use the TV control buttons to control the TV.

For more details on operating the cable box

Refer to the operating instructions that come with the cable box.

Manufactures and Code Numbers (cable box)

Manufacturer	Code number
JERROLD	60, 61, 62, 63, 64, 65
PIONEER	69, 70
SCIENTIFIC ATLANTA	66, 67
TOCOM	71, 72
ZENITH	68

Specifications

Television system American TV standards

Channel coverage VHF: 2-13
UHF: 14-69
Cable TV: 1-125

Picture tube Microblack™ Trinitron^{V} tube
27-inch picture measured diagonally
29-inch picture tube measured diagonally (KV-27TS29/27TS32/27TS36/27TW77/27TW78/2970M/2975M)

32-inch picture measured diagonally
34-inch picture tube measured diagonally (KV-32TS36/32TS46/32TW67/32TW68/32TW77/32TW78)

Antenna 75-ohm external antenna terminal for VHF/UHF

Input VIDEO and S VIDEO
S VIDEO IN (S terminal)
Y: 1 Vp-p, 75-ohms unbalanced, sync negative
C: 0.286 Vp-p (Burst signal), 75-ohms
Video (phono jacks): 1 Vp-p, 75-ohms unbalanced, sync negative
Audio (phono jacks): 500 mVrms (100% modulation)
Impedance: 47 kilohms

Output AUDIO OUT (phono jacks)
More than 408 mVrms at the maximum volume setting (variable)
More than 408 mVrms (fix)
Impedances: 5 kilohms

Speaker output 5 W 2

Power requirements 120 V AC, 60 Hz

Power consumption

KV-27TS29/KV-27TS32	165 W
KV-27TS36	170 W
KV-32TS36	195 W
KV-32TS46	205 W
KV-27TW77/KV-27TW78	170 W
KV-32TW67/KV-32TW68 KV-32TW77/KV-32TW78	195 W
KV-2970M	165 W
KV-2975M	170 W
standby mode	5 W

Dimensions/Weight

KV-27TS29	661 603 522 mm (26 1/8 23 3/4 20 5/8 in.)	42.3 kg (93 lbs 5 oz)
KV-27TS32	661 603 522 mm (26 1/8 23 3/4 20 5/8 in.)	42.3 kg (93 lbs 5 oz)
KV-27TS36	661 603 522 mm (26 1/8 23 3/4 20 5/8 in.)	42.3 kg (93 lbs 5 oz)
KV-32TS36	781 712 612 mm (30 3/4 28 1/8 24 1/8 in.)	71 kg (156 lbs 9 oz)
KV-32TS46	781 712 612 mm (30 3/4 28 1/8 24 1/8 in.)	71 kg (156 lbs 9 oz)
KV-27TW77	750 1041 655 mm (29 5/8 41 25 7/8 in.)	83.6 kg (184 lbs)
KV-27TW78	750 1041 655 mm (29 5/8 41 25 7/8 in.)	83.6 kg (184 lbs)
KV-32TW67	895 1117 700 mm (35 1/4 44 27 5/8 in.)	108.6 kg (239 lbs)
KV-32TW68	895 1117 700 mm (35 1/4 44 27 5/8 in.)	108.6 kg (239 lbs)
KV-32TW77	895 1117 700 mm (35 1/4 44 27 5/8 in.)	108.6 kg (239 lbs)
KV-32TW78	895 1117 700 mm (35 1/4 44 27 5/8 in.)	108.6 kg (239 lbs)
KV-2970M	661 603 522 mm (26 1/8 23 3/4 20 5/8 in.)	42.3 kg (93 lbs 5 oz)
KV-2975M	661 603 522 mm (26 1/8 23 3/4 20 5/8 in.)	42.3 kg (93 lbs 5 oz)

Supplied accessories

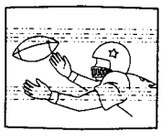
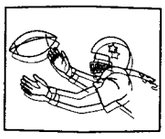
(KV-27TS29)
Remote Commander RM-Y116(1) with 2 size AA (R6) batteries
(KV-27TS32)
Remote Commander RM-Y117(1) with 1 size AA (R6) battery
(KV-27TS36/32TS36/32TS46/27TW77/27TW78/32TW67/32TW68/32TW77/32TW78)
Remote Commander RM-Y118(1) with 1 size AA (R6) battery
(KV-32TS46)
Active Super Woofer

Recommended accessories

U/V mixer EAC-66
Connecting cable
VMC-810S/820S, VMC-720M, YC-15V/30V, RK-74A

Design and specifications are subject to change without notice.

Troubleshooting

Poor or no picture (screen not lit), good sound	• Adjust PICTURE. • Adjust BRIGHTNESS. • Check antenna/cable connections.
Good picture, no sound	• Press VOLUME + on the TV or VOL + on the Remote Commander. • Press MUTING on the Remote Commander. • Check that the MTS setting is set correctly. • Check that the TV/VIDEO button is set correctly. • Check that SPEAKER is set to ON.
No picture (screen not lit), no sound	• Is POWER switched on ? • Check the power cord connection. • Check that the TV/VIDEO button is set correctly. • Check that S VIDEO is set to ON.
No color	• Is it a color program ? • Adjust COLOR.
Snow and noise only	• Is it an active or the correct channel ? • Check the CABLE setting. • Check antenna/cable connections.
 Dotted lines or stripes	This is often caused by local interference. (e.g. cars, neon signs, hairdryers etc.) Adjust the antenna for minimum interference.
 Double images or ghosts	Reflections from nearby mountains or buildings often cause this problem. A highly directional outdoor antenna or a CATV cable may improve the picture.
Try another channel. It could be station trouble.	

If the problem persists, contact your nearest service facility.